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THERMODYNAMIC PROPERTIES OF ISOBUTANE

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Abstract

A thermodynamic surface is presented for the thermodynamic properties of isobutane for temperatures from 250 to 700 K and pressures up to 40 MPa, exclusive of the critical region. The surface expressed analytically is in the form of the Helmholtz free energy as a function of temperature and density. The Helmholtz free energy is based upon three contributions: that of the ideal gas, of a physically based function incorporating the effects of molecular repulsion and attraction, and of a sum of residual terms that compensate for inadequacies of the physically based function. The surface is in accord with selected validated pressure-density-temperature data to within an average density tolerance of 0.1 percent with the exception of the critical region. Detailed thermodynamic tables of isobutane expressed in three different unit systems and the computer programs for generating the properties are presented in the paper.

I. Synopsis

We present a thermodynamic surface for isobutane for temperatures from 250 to 700 K and pressures up to 40 MPa. The properties are directed towards geothermal energy applications. Isobutane has been used as the heat exchanger fluid for the conversion of geothermal energy to electrical energy and, consequently, definitive knowledge of its properties facilitates efficient design and operation of geothermal power plants. The surface is in the form of the Helmholtz free energy as a function of density and temperature. It is generated with the use of a computer program that permits calculation of all equilibrium thermodynamic properties, including energy, enthalpy, entropy, and specific heats, for given input values of either density and temperature or pressure and temperature. The surface is in accord with selected and validated P-ρ-T data to an average density tolerace of 0.1 percent over most of the gas and liquid phase regions with the exception of a small region around the critical point where the deviations are larger. For the user's convenience, detailed thermodynamic tables of isobutane expressed in three different unit systems and the computer program for generating the properties are presented herein.

II. Description of the Surface

The model used for the Helmholtz free energy $A(T,\rho)$ as a function of temperature T and density ρ is that developed by Haar and coworkers [H1979],

$$A(T,\rho) = A^{o}(T,\rho_{o}) + A_{base}(T,\rho) + A_{res.}(T,\rho) \quad . \qquad (1)$$

The Helmholtz free energy, $A(T,\rho)$, represents the sum of three contributions. The first, $A^o(T,\rho_o)$, is the contribution of the ideal gas for a reference density ρ_o corresponding to a pressure of 0.101325 MPa (1 atm) and the reference condition $A^o(0\ K,\rho_o) = 0$. The second, $A_{base}(T,\rho)$, is of a physically based expression incorporating the effects of molecular repulsion and attraction. The remaining contribution consists of a sum of residual terms, $A_{res.}(T,\rho)$, that compensate for the difference between experimental pressure data and corresponding values of pressure defined by the function $A_{base}(T,\rho)$.

To facilitate the reader's use of the equations presented in the development of the surface, we have expressed the equations in a dimensionless form. Some of the equations are inherently dimensionless; i.e., the variables are expressed as reduced quantities. The others are based on quantities initially defined in the SI unit system and then transformed into dimensionless quantities. For example, the temperature variable is expressed as $T=T/T^*$ where T^* is the equivalent of 1 K for the unit system used. Similarly, other quantities are expressed relative to either unit equivalents or their inverse values. Transformed quantities are designated by italicized letters[1] and unit equivalents by the superscript *. For different unit systems, values of unit equivalents, gas constant (R), and isobutane molecular weight (M) are listed in Table I. Conversion factors to facilitate the conversion of quantities expressed in one unit system to another are listed in Table IX.

The evaluation of $A^o(T,\rho_o)$ is based on an analytical representation of ideal-gas isobaric heat-capacity values calculated by Chen et al. [C1975]. The equation is of the form, initially suggested by Barieau [B1965],

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[1] Italicized ρ is denoted by the symbol P.

$$\frac{C_p^o}{R} = \sum_{i=1}^{7} N_i T^{i-4} + \frac{N_8 u^2 e^u}{(e^u-1)^2} \qquad (2)$$

where $u = N_9/T$.

Values of the constants N_1---N_9 are given in Table II, values of R in Table I.

$A_{base}(T,\rho)$ is a physically-based expression incorporating the main effects of molecular repulsion and attraction. It is given by

$$\frac{A_{base}(T,\rho)}{RT} = -\ell n(1-y) + 1.5\,(1-y)^{-2} + 4y\,(\frac{B}{b} - 1) - 1.5 + \ell n\, p/p_o \quad . \quad (3)$$

where $y = bp/4$.

The quantity b is a temperature-dependent hard-sphere volume given by

$$b\rho^* = b = b_o + b_L \ell n \left(\frac{T_c}{T}\right) + b_4 \left(\frac{T_c}{T}\right)^4 + b_8 \left(\frac{T_c}{T}\right)^8 \quad . \quad (4)$$

The value of the absolute critical temperature T_c is listed in Table I. It was obtained by reanalysis [W1978] of Beattie's data [B1949]. The values of the constants b_o---b_8 are given in Table III.

The quantity B is the "second virial coefficient," which we have represented by

$$Bp^* = B = B_o + B_1\left(\frac{T_c}{T}\right) + B_3 \left(\frac{T_c}{T}\right)^3 + B_5 \left(\frac{T_c}{T}\right)^5 + B_{10} \left(\frac{T_c}{T}\right)^{10} . \quad (5)$$

The values of the constants B_o---B_{10} are given in Table IV.

$A_{res.}(T,\rho)$ is a sum of deviation functions with coefficients that are adjusted for an optimum fit of the surface to P-ρ-T data. It is of the form

$$\frac{A_{res.}(T,\rho)}{P^*/\rho^*} = \sum_{n,j} C_{n,j} \left(\frac{T_c}{T}\right)^j \frac{(1-e^{-\alpha p})^{n+1}}{\alpha(n+1)} \quad . \qquad (6)$$

The values of the constants α and $C_{n,j}$ are listed in Table V. The vapor pressure equation we used is of the form

$$\ell n \frac{P}{P_c} = \frac{T_c}{T}\left[a_1\left(1-\frac{T}{T_c}\right) + a_2\left(1-\frac{T}{T_c}\right)^{3/2} + a_5\left(1-\frac{T}{T_c}\right)^3\right], \quad (7)$$

which is applicable in the range 245 K < T < T_c .

We also have as an option the equation

$$\frac{P}{P_c} = 1 + A_1\left(1-\frac{T}{T_c}\right) + A^-\left(1-\frac{T}{T_c}\right)^{2-\theta} + A_2\left(1-\frac{T}{T_c}\right)^2 + A_3\left(1-\frac{T}{T_c}\right)^3 \quad (8)$$

for the range 298 K < T < T_c. The value of the critical pressure P_c obtained by reanalysis [W1978] of Beattie's data [B1949] is given in Table I. The dimensionless constants a_1---a_5 and A_1---A_3 are given in Tables VI and VII, respectively. Equation (8) has a theoretical foundation. The differences between Eqs. (7) and (8) are marginal, 0.0002 MPa or less for temperatures between 298 K and 407.5 K.

Given the vapor pressure as defined by Eq. (7), the surface fit was optimized to satisfy the Gibbs condition across the phase boundary to close tolerance. The surface fit, including the two-phase region, is a close approximation to all of the properties used to determine the final surface: P-ρ-T data, second virial coefficients, and vapor pressures.

The region of applicability of our surface exclusive of the critical region is 250 to 600 K with an extrapolation range to 700 K and pressures to 40 MPa.

III. Tolerances

Our surface is based on the following selected and validated data sets.

P-ρ-T data

vapor phase	Connolly [C1962] Waxman et al. [W1979]
liquid phase	Haynes [H1980]
supercritical critical region	Beattie [B1950] Waxman et al. [W1978]

vapor pressure data

Waxman et al. [W1978]

Several other data sets of lower quality [M1939 and S1938] were included in the surface fit in regions where no primary data were available. They were assigned a low statistical weight as compared to that for the selected data. No attempt was made to convert the input data to a common temperature scale; the limited accuracy of the data did not justify distinguishing between temperature scales.

Our surface represents the densities of the primary data to 0.1 percent in the entire range with the exception of a region around the critical point. It represents the primary vapor pressure data to within 0.0006 MPa for $245 \leq T \leq 373$ K and with a tolerance increasing to 0.0026 MPa for higher temperatures.

IV. Isobutane Thermodynamic Properties

Our results are primarily represented by a computer program which will yield any desired thermodynamic property value for given input values of either density and temperature, or pressure and temperature. The program

is designed to operate in an interactive mode. This mode can be superseded by the simple expedient of producing an input file in a batch operation.

Thermodynamic tables, generated with the program, and a listing of the program are presented herein. Also, the program will be made available on magnetic tape or as a deck of cards. We will be able to provide, for small regions of engineering interest, the properties listed as an array on magnetic tape. This would facilitate the use of the information on most computers.

For the convenience of the user, we give a list of units and conversion factors in Table IX.

V. Comments

Our surface can be used reliably in the range specified in eq. (1) with the exception of a region around the critical point defined by

$$0.99 < T_c/T < 1.01$$

and

$$0.7 < \rho_c/\rho < 1.3 \quad . \tag{9}$$

The critical parameters defined by the surface differ from the ones we have derived from the critical region data of Beattie [B1978], since this region was unconstrained in our development of the surface. The derived parameters are used in eqs. (5)-(9). Accurate values of P-ρ-T properties inside the excluded region can be obtained from a separate formulation of the critical region presented in a previous report [W1978], and to be separately submitted as a follow-up to the present document. Slight discontinuities will exist where the two regions overlap.

Although this may be of little direct importance in geothermal applications, the extension of our surface to temperatures below 260 K is necessary to complete the thermodynamic description of isobutane in the vapor and liquid phases from the critical point to about the triple point. Our future work will also concern predictive modeling which would be applicable to similar substances. Another objective will be to achieve a closer approximation to P-ρ-T data near the top of the coexistence dome.

VI. Comparisons

We compare our surface with two sets of experimental data not used in the correlation development, see Table X.

The isobaric heat capacities in the vapor phase compare favorably with directly measured values [E1970 and W1947] to within 1/2 percent. In the liquid phase, the agreement is of the same order.

For the latent heat, we have agreement to 1 percent with experimental data [A1940, D1926, D1967, H1976 and S1938] up to 360 K. Above this temperature, our surface yields latent heats that are increasingly higher than the experimental ones [S1938] when the critical temperature is approached to a maximum of 7.5 percent at 390 K. Even though our surface yields appropriate vapor pressures in that range, apparently the coexistence dome is not well enough defined to give an accurate latent heat. The P-ρ-T data are sparse in this region.

The quality of the surface reflects mainly the distribution and quality of the data on which it is based. Other functional approaches should yield comparable surfaces for the same data. An example is the recent isochoric

correlation of isobutane by Goodwin and Haynes [G1981] for the Gas Research Inst. (U.S.). The isochoric and isobaric heat capacities of isobutane defined by the two different types of correlation compare favorable with each other to a mean tolerance of 3 percent. However, there is an important distinction between the two methods. The isochoric surface is only defined along isochores whereas our surface is analytic throughout its specified region.

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Table I

Constants

	p^*		ρ^*		T^*
10^3 kPa	1	kg/m^3	1	K	1
bar	10	mol/dm^3	1.72045×10^{-2}	K	1
psi	145.0377	lb/ft^3	6.24280×10^{-2}	F	1.8

R		M(isobutane)	
kJ/kg·K	0.1430452	g/mol	58.1243
J/mol·K	8.31440	lb/mol	0.1281422
BTU/lb·F	0.0341658		

Table II

Constants Defining the Ideal-gas Heat Capacity, Eq. 2

i	N_i
1	0.113634×10^{8}
2	-0.460434×10^{6}
3	0.622522×10^{4}
4	-0.298782×10^{2}
5	0.142485
6	-0.661030×10^{-4}
7	0.115812×10^{-7}
8	-0.208957×10^{2}
9	0.3250×10^{4}

Table III

Constants Defining the Hard-Sphere Volume, Eq. 4

i	$10^3 b_i$
0	2.72962
L	0.694809
4	-4.46930×10^{-3}
8	1.75219×10^{-5}

Table IV

Constants Defining the Second Virial, Eq. 5

i	$10^3 B_i$
0	3.67237
1	-7.52673
3	-1.78220
5	0.163192
10	-0.110120×10^{-3}

Table V

Constants Defining the Residual Function, Eq. 6[a]

n,j	C_{nj}
1,1	-5.32461×10^{-4}
2,1	2.32047×10^{-3}
4,1	-1.74015×10^{-2}
5,1	9.03851×10^{-2}
6,1	-9.29326×10^{-2}
8,1	3.52214×10^{-2}
1,2	-6.85169×10^{-4}
3,2	-3.84671×10^{-3}
5,2	-9.56414×10^{-2}
6,2	1.03133×10^{-1}
7,2	9.19327×10^{-2}
8,2	-1.05560×10^{-1}
1,3	3.21859×10^{-3}
2,3	-4.15421×10^{-3}
4,3	3.20563×10^{-2}
6,3	-7.38111×10^{-2}
8,3	6.50946×10^{-2}
1,4	-1.27011×10^{-3}
6,4	-2.81116×10^{-3}
1,5	-5.63115×10^{-4}
2,5	2.50405×10^{-3}
5,5	-5.57420×10^{-3}
8,5	6.35584×10^{-3}
2,6	-4.43970×10^{-5}
8,6	9.27466×10^{-6}

[a] $C_{n,j}$ values not listed are equal to zero. Constant (α)=1.72045×10^{-3} ρ^*.

Table VI

Constants Defining the Primary Vapor Pressure Function, Eq. 7

i	a_i
1	-6.83796
2	1.25220
5	-2.34060

Table VII

Constants Defining the Auxiliary Vapor Pressure Function, Eq. 8[a]

A_1	6.818526
A^-	22.01824
A_2	-10.73853
A_3	6.8431

[a]Constant θ=0.11.

Table VIII

Critical Point Constants[a]

P_c, 10^3 kPa	ρ_c, kg/m^3	T_c, K
3.6306	227.0	407.851

[a]Values were calculated by Levelt Sengers [W1978, from B1949].

Table IX

Units and Conversion Factors

Units	Pressure	Density	Temperature	Energy
SI	10^3 kPa	kg/m^3	K	kJ/kg
"Chemical"	bar	mol/dm^3	K	J/mol
"Engineering"	psi(abs.)	lb/ft^3	^oF	BTU/lb

Pressure conversion factors

	10^3 kPa	bar	psi
1 10^3 kPa		10	145.0377
1 bar	0.1		14.50377
1 psi	6.894757×10^{-3}	6.89457×10^{-2}	
1 atm	0.101325	1.01325	14.69595

Density conversion factors

	kg/m^3	mol/dm^3	lb/ft^3
kg/m^3		1.72045×10^{-2}	6.24280×10^{-2}
mol/dm^3	58.1243		3.62858
lb/ft^3	16.0185	0.275590	

Energy conversion factors

	kJ/kg	J/mol	BTU/lb
kJ/kg		58.1243	0.429923
J/mol	1.72045×10^{-2}		7.39661×10^{-3}
BTU/lb	2.32600	135.197	

Table XI

Comparison of Isobaric Heat Capacities

Region	Temperature, K	Pressure, 10^3 kPa	C_p, kJ/kg·K		
Sat. liq.			This work	Aston[A1940]	Parks[P1937]
	230	0.0247	2.078	2.087	2.078
	240	0.0404	2.130	2.139	2.121
	250	0.7634	2.173	2.187	2.168
	260	0.0958	2.212	2.231	2.219
Vapor			This work	Ernst[E1970]	Wacker[W1947]
	293.15	0.0490	1.651	1.638	
		0.1471	1.676	1.670	
		0.1961	1.693	1.706	
	353.15	0.0490	1.930	1.922	
		0.1471	1.942	1.935	
		0.4903	2.004	2.011	
		0.7845	2.086	2.096	
	243.15	0.0121	1.416		1.424
		0.0234	1.420		1.431
		0.0301	1.422		1.435
	273.15	0.0249	1.554		1.558
		0.0505	1.560		1.569
	313.15	0.0245	1.739		1.740
		0.0512	1.743		1.745
	353.15	0.0247	1.927		1.926
		0.0513	1.930		1.929

Table XI. (cont'd)

Comparison of Latent Heats (L):
Experimental Values w.r.t. Surface Defined Values

T,K	$(L_{expt.} - L_{surface})/L_{surface} \times 100$			
	Aston [A1940]	Dana [D1926]	Hansen [H1946]	Sage [S1938]
261.38[a]	0.31			
270		0.23		
280		0.04		
290		0.15		-0.43
300		-0.35		-0.04
310		-0.72	-0.76	-0.08
320		-1.33		-0.06
330		-1.87		-0.21
340				-0.29
350				-0.42
360				-0.91
370				-1.33
380				-3.17
390				-7.48

[a]Normal boiling point.

TABLES AT SATURATION

T	PRESSURE	DENSITIES - KG/M3		SPEC VOL M3/KG		H - KJ/KG		HEAT OF VAP
K	MPA	LIQ	VAP	LIQ	VAP	LIQ	VAP	KJ/KG
250.00	.0634	605.833	1.823	.001651	.54853	-25.09	350.01	375.11
251.00	.0662	604.769	1.897	.001654	.52703	-22.91	351.35	374.26
252.00	.0691	603.702	1.974	.001656	.50654	-20.73	352.69	373.42
253.00	.0721	602.631	2.053	.001659	.48702	-18.54	354.03	372.57
254.00	.0752	601.558	2.135	.001662	.46842	-16.35	355.37	371.71
255.00	.0784	600.482	2.219	.001665	.45067	-14.15	356.71	370.86
256.00	.0817	599.402	2.305	.001668	.43375	-11.95	358.05	370.00
257.00	.0851	598.320	2.395	.001671	.41759	-9.74	359.39	369.14
258.00	.0886	597.234	2.486	.001674	.40217	-7.53	360.74	368.27
259.00	.0922	596.145	2.581	.001677	.38744	-5.32	362.08	367.40
260.00	.0959	595.052	2.678	.001681	.37337	-3.10	363.43	366.53
261.00	.0998	593.956	2.778	.001684	.35991	-.88	364.78	365.65
262.00	.1037	592.857	2.881	.001687	.34705	1.35	366.12	364.77
263.00	.1078	591.754	2.987	.001690	.33475	3.58	367.47	363.89
264.00	.1121	590.647	3.096	.001693	.32297	5.82	368.82	363.00
265.00	.1164	589.537	3.208	.001696	.31170	8.06	370.17	362.11
266.00	.1209	588.423	3.323	.001699	.30091	10.31	371.52	361.21
267.00	.1255	587.306	3.441	.001703	.29058	12.56	372.87	360.31
268.00	.1302	586.185	3.563	.001706	.28067	14.82	374.22	359.41
269.00	.1351	585.060	3.688	.001709	.27118	17.08	375.58	358.50
270.00	.1401	583.931	3.816	.001713	.26208	19.34	376.93	357.58
271.00	.1453	582.798	3.947	.001716	.25334	21.62	378.28	356.66
272.00	.1506	581.662	4.082	.001719	.24497	23.89	379.63	355.74
273.00	.1560	580.521	4.221	.001723	.23693	26.17	380.99	354.81
274.00	.1616	579.376	4.363	.001726	.22921	28.46	382.34	353.88
275.00	.1674	578.228	4.509	.001729	.22179	30.75	383.69	352.94
276.00	.1733	577.075	4.658	.001733	.21467	33.05	385.05	352.00
277.00	.1794	575.917	4.812	.001736	.20783	35.35	386.40	351.05
278.00	.1856	574.756	4.969	.001740	.20125	37.65	387.75	350.10
279.00	.1920	573.590	5.130	.001743	.19493	39.97	389.10	349.14
280.00	.1985	572.420	5.295	.001747	.18884	42.28	390.46	348.17
281.00	.2053	571.245	5.465	.001751	.18299	44.61	391.81	347.20
282.00	.2122	570.066	5.638	.001754	.17736	46.94	393.16	346.23
283.00	.2193	568.882	5.816	.001758	.17193	49.27	394.51	345.24
284.00	.2265	567.694	5.998	.001762	.16671	51.61	395.87	344.25
285.00	.2340	566.500	6.185	.001765	.16168	53.96	397.22	343.26
286.00	.2416	565.302	6.376	.001769	.15684	56.31	398.57	342.26
287.00	.2494	564.100	6.572	.001773	.15217	58.67	399.92	341.25
288.00	.2574	562.892	6.772	.001777	.14767	61.03	401.27	340.24
289.00	.2656	561.679	6.977	.001780	.14333	63.40	402.61	339.21
290.00	.2740	560.461	7.187	.001784	.13914	65.78	403.96	338.19
291.00	.2826	559.239	7.402	.001788	.13510	68.16	405.31	337.15
292.00	.2914	558.010	7.621	.001792	.13121	70.54	406.65	336.11
293.00	.3004	556.777	7.846	.001796	.12745	72.94	408.00	335.06
294.00	.3096	555.538	8.076	.001800	.12382	75.34	409.34	334.00
295.00	.3190	554.294	8.312	.001804	.12031	77.75	410.69	332.94
296.00	.3286	553.045	8.552	.001808	.11693	80.16	412.03	331.87
297.00	.3385	551.790	8.799	.001812	.11365	82.58	413.37	330.79
298.00	.3485	550.529	9.050	.001816	.11049	85.00	414.71	329.70
299.00	.3588	549.262	9.308	.001821	.10744	87.44	416.04	328.61
300.00	.3693	547.990	9.571	.001825	.10448	89.88	417.38	327.50
301.00	.3801	546.711	9.840	.001829	.10163	92.32	418.71	326.39

TABLES AT SATURATION

T	PRESSURE	DENSITIES - KG/M3		SPEC VOL M3/KG		H - KJ/KG		HEAT OF VAP
K	MPA	LIQ	VAP	LIQ	VAP	LIQ	VAP	KJ/KG
302.00	.3911	545.427	10.115	.001833	.09886	94.77	420.05	325.27
303.00	.4023	544.136	10.395	.001838	.09620	97.23	421.38	324.15
304.00	.4137	542.840	10.683	.001842	.09361	99.70	422.71	323.01
305.00	.4255	541.537	10.977	.001847	.09110	102.17	424.03	321.86
306.00	.4374	540.228	11.277	.001851	.08867	104.65	425.36	320.70
307.00	.4496	538.912	11.584	.001856	.08632	107.14	426.68	319.54
308.00	.4620	537.589	11.898	.001860	.08405	109.64	428.00	318.36
309.00	.4747	536.260	12.218	.001865	.08185	112.14	429.32	317.18
310.00	.4877	534.924	12.546	.001869	.07971	114.65	430.63	315.98
311.00	.5009	533.581	12.878	.001874	.07765	117.17	431.96	314.79
312.00	.5144	532.231	13.219	.001879	.07565	119.69	433.27	313.58
313.00	.5282	530.874	13.567	.001884	.07371	122.22	434.58	312.36
314.00	.5422	529.510	13.923	.001889	.07182	124.76	435.88	311.12
315.00	.5565	528.138	14.287	.001893	.06999	127.31	437.19	309.88
316.00	.5711	526.759	14.658	.001898	.06822	129.86	438.49	308.63
317.00	.5860	525.372	15.037	.001903	.06650	132.42	439.79	307.37
318.00	.6011	523.978	15.424	.001908	.06483	134.99	441.09	306.09
319.00	.6166	522.575	15.819	.001914	.06321	137.57	442.38	304.81
320.00	.6323	521.164	16.223	.001919	.06164	140.16	443.67	303.51
321.00	.6483	519.745	16.635	.001924	.06011	142.75	444.96	302.20
322.00	.6647	518.318	17.056	.001929	.05863	145.36	446.24	300.88
323.00	.6813	516.882	17.486	.001935	.05719	147.97	447.52	299.55
324.00	.6982	515.438	17.924	.001940	.05579	150.59	448.80	298.21
325.00	.7155	513.985	18.372	.001946	.05443	153.21	450.07	296.85
326.00	.7330	512.522	18.829	.001951	.05311	155.85	451.34	295.49
327.00	.7509	511.051	19.296	.001957	.05182	158.49	452.60	294.11
328.00	.7691	509.570	19.772	.001962	.05058	161.15	453.86	292.72
329.00	.7876	508.080	20.259	.001968	.04936	163.81	455.12	291.31
330.00	.8065	506.580	20.756	.001974	.04818	166.48	456.37	289.89
331.00	.8257	505.069	21.263	.001980	.04703	169.16	457.62	288.46
332.00	.8452	503.549	21.780	.001986	.04591	171.85	458.86	287.01
333.00	.8650	502.019	22.309	.001992	.04483	174.55	460.10	285.56
334.00	.8852	500.477	22.848	.001998	.04377	177.26	461.34	284.08
335.00	.9057	498.925	23.399	.002004	.04274	179.97	462.57	282.59
336.00	.9266	497.362	23.962	.002011	.04173	182.70	463.79	281.09
337.00	.9479	495.788	24.536	.002017	.04076	185.43	465.01	279.58
338.00	.9695	494.202	25.122	.002023	.03981	188.18	466.22	278.04
339.00	.9914	492.604	25.721	.002030	.03888	190.94	467.43	276.50
340.00	1.0137	490.995	26.333	.002037	.03798	193.70	468.63	274.93
341.00	1.0364	489.372	26.957	.002043	.03710	196.48	469.83	273.35
342.00	1.0595	487.738	27.599	.002050	.03623	199.26	471.01	271.75
343.00	1.0829	486.090	28.250	.002057	.03540	202.06	472.19	270.14
344.00	1.1067	484.429	28.915	.002064	.03458	204.87	473.37	268.51
345.00	1.1309	482.755	29.594	.002071	.03379	207.68	474.54	266.86
346.00	1.1555	481.066	30.287	.002079	.03302	210.51	475.71	265.20
347.00	1.1804	479.363	30.995	.002086	.03226	213.35	476.87	263.52
348.00	1.2056	477.645	31.719	.002094	.03153	216.20	478.02	261.82
349.00	1.2316	475.912	32.458	.002101	.03081	219.06	479.16	260.10
350.00	1.2577	474.164	33.214	.002109	.03011	221.93	480.30	258.36
351.00	1.2843	472.399	33.986	.002117	.02942	224.82	481.42	256.60
352.00	1.3113	470.619	34.775	.002125	.02876	227.72	482.54	254.82
353.00	1.3387	468.821	35.582	.002133	.02810	230.62	483.65	253.03

TABLES AT SATURATION

T	PRESSURE	DENSITIES - KG/M3		SPEC VOL M3/KG		H - KJ/KG		HEAT OF VAP
K	MPA	LIQ	VAP	LIQ	VAP	LIQ	VAP	KJ/KG
354.00	1.3665	467.006	36.407	.002141	.02747	233.55	484.75	251.21
355.00	1.3947	465.174	37.250	.002150	.02685	236.48	485.84	249.36
356.00	1.4234	463.323	38.112	.002158	.02624	239.43	486.92	247.50
357.00	1.4525	461.452	38.994	.002167	.02564	242.38	488.00	245.61
358.00	1.4820	459.563	39.897	.002176	.02506	245.36	489.06	243.70
359.00	1.5119	457.653	40.820	.002185	.02450	248.34	490.11	241.76
360.00	1.5424	455.722	41.764	.002194	.02394	251.34	491.15	239.80
361.00	1.5732	453.770	42.731	.002204	.02340	254.36	492.17	237.82
362.00	1.6045	451.796	43.721	.002213	.02287	257.38	493.19	235.80
363.00	1.6363	449.798	44.735	.002223	.02235	260.43	494.19	233.76
364.00	1.6685	447.777	45.773	.002233	.02185	263.49	495.18	231.70
365.00	1.7012	445.731	46.837	.002244	.02135	266.56	496.16	229.60
366.00	1.7344	443.659	47.927	.002254	.02087	269.65	497.12	227.47
367.00	1.7680	441.561	49.045	.002265	.02039	272.75	498.07	225.31
368.00	1.8021	439.435	50.191	.002276	.01992	275.88	499.00	223.12
369.00	1.8367	437.280	51.366	.002287	.01947	279.02	499.91	220.90
370.00	1.8718	435.095	52.572	.002298	.01902	282.17	500.81	218.64
371.00	1.9074	432.879	53.810	.002310	.01858	285.35	501.69	216.34
372.00	1.9435	430.631	55.082	.002322	.01815	288.54	502.56	214.01
373.00	1.9801	428.348	56.388	.002335	.01773	291.76	503.40	211.64
374.00	2.0172	426.030	57.730	.002347	.01732	294.99	504.22	209.23
375.00	2.0548	423.675	59.110	.002360	.01692	298.25	505.02	206.78
376.00	2.0929	421.280	60.531	.002374	.01652	301.52	505.80	204.28
377.00	2.1316	418.845	61.992	.002388	.01613	304.82	506.56	201.74
378.00	2.1708	416.366	63.498	.002402	.01575	308.14	507.29	199.15
379.00	2.2105	413.843	65.049	.002416	.01537	311.49	507.99	196.50
380.00	2.2508	411.271	66.649	.002431	.01500	314.86	508.67	193.81
381.00	2.2917	408.649	68.301	.002447	.01464	318.26	509.32	191.06
382.00	2.3331	405.973	70.006	.002463	.01428	321.68	509.93	188.25
383.00	2.3750	403.241	71.769	.002480	.01393	325.14	510.51	185.37
384.00	2.4176	400.437	73.554	.002497	.01360	328.63	511.10	182.48
385.00	2.4607	397.577	75.435	.002515	.01326	332.15	511.62	179.47
386.00	2.5044	394.648	77.384	.002534	.01292	335.70	512.10	176.40
387.00	2.5486	391.644	79.406	.002553	.01259	339.29	512.53	173.24
388.00	2.5935	388.561	81.506	.002574	.01227	342.92	512.92	170.00
389.00	2.6390	385.392	83.691	.002595	.01195	346.59	513.26	166.67
390.00	2.6851	382.129	85.967	.002617	.01163	350.31	513.55	163.24
391.00	2.7319	378.765	88.342	.002640	.01132	354.07	513.78	159.71
392.00	2.7793	375.291	90.824	.002665	.01101	357.88	513.94	156.06
393.00	2.8273	371.695	93.425	.002690	.01070	361.76	514.03	152.28
394.00	2.8760	367.965	96.156	.002718	.01040	365.69	514.05	148.36
395.00	2.9253	364.086	99.030	.002747	.01010	369.70	513.99	144.29
396.00	2.9754	360.041	102.066	.002777	.00980	373.78	513.82	140.05
397.00	3.0261	355.809	105.282	.002810	.00950	377.94	513.56	135.62
398.00	3.0775	351.364	108.702	.002846	.00920	382.20	513.17	130.97
399.00	3.1297	346.674	112.358	.002885	.00890	386.57	512.64	126.07
400.00	3.1826	341.701	116.287	.002927	.00860	391.08	511.96	120.88
401.00	3.2362	336.392	120.536	.002973	.00830	395.73	511.09	115.36
402.00	3.2907	330.681	125.171	.003024	.00799	400.56	509.99	109.43
403.00	3.3459	324.475	130.278	.003082	.00768	405.61	508.62	103.01
404.00	3.4020	317.646	135.979	.003148	.00735	410.95	506.92	95.97
405.00	3.4589	309.999	142.459	.003226	.00702	416.65	504.77	88.12

TABLES AT SATURATION

T	PRESSURE	DENSITIES - MOL/DM3		VOL DM3/MOL		H - J/MOL		HEAT OF VAP
K	BAR	LIQ	VAP	LIQ	VAP	LIQ	VAP	J/MOL
250.00	.634	10.42305	.03136	.095941	31.88291	-1459.	20344.	21803.
251.00	.662	10.40475	.03264	.096110	30.63337	-1332.	20422.	21754.
252.00	.691	10.38639	.03396	.096280	29.44226	-1205.	20500.	21705.
253.00	.721	10.36798	.03533	.096451	28.30780	-1078.	20577.	21655.
254.00	.752	10.34951	.03673	.096623	27.22639	-950.	20655.	21606.
255.00	.784	10.33100	.03818	.096796	26.19514	-823.	20733.	21556.
256.00	.817	10.31242	.03966	.096970	25.21132	-695.	20811.	21506.
257.00	.851	10.29380	.04120	.097146	24.27239	-566.	20889.	21456.
258.00	.886	10.27511	.04278	.097323	23.37595	-438.	20968.	21406.
259.00	.922	10.25637	.04441	.097500	22.51976	-309.	21046.	21355.
260.00	.959	10.23758	.04608	.097679	21.70169	-180.	21124.	21304.
261.00	.998	10.21872	.04780	.097860	20.91975	-51.	21202.	21253.
262.00	1.037	10.19981	.04957	.098041	20.17209	79.	21281.	21202.
263.00	1.078	10.18083	.05140	.098224	19.45692	208.	21359.	21151.
264.00	1.121	10.16179	.05327	.098408	18.77260	338.	21437.	21099.
265.00	1.164	10.14270	.05520	.098593	18.11756	469.	21516.	21047.
266.00	1.209	10.12353	.05717	.098780	17.49033	599.	21594.	20995.
267.00	1.255	10.10431	.05921	.098968	16.88953	730.	21673.	20943.
268.00	1.302	10.08502	.06130	.099157	16.31384	861.	21751.	20890.
269.00	1.351	10.06567	.06344	.099348	15.76203	993.	21830.	20837.
270.00	1.401	10.04625	.06565	.099540	15.23293	1124.	21909.	20784.
271.00	1.453	10.02676	.06791	.099733	14.72544	1256.	21987.	20731.
272.00	1.506	10.00720	.07023	.099928	14.23853	1389.	22066.	20677.
273.00	1.560	9.98758	.07262	.100124	13.77120	1521.	22145.	20623.
274.00	1.616	9.96789	.07506	.100322	13.32253	1654.	22223.	20569.
275.00	1.674	9.94812	.07757	.100521	12.89164	1787.	22302.	20515.
276.00	1.733	9.92828	.08014	.100722	12.47770	1921.	22380.	20460.
277.00	1.794	9.90838	.08278	.100925	12.07992	2055.	22459.	20405.
278.00	1.856	9.88839	.08549	.101129	11.69756	2189.	22538.	20349.
279.00	1.920	9.86833	.08826	.101334	11.32990	2323.	22616.	20293.
280.00	1.985	9.84820	.09111	.101541	10.97628	2458.	22695.	20237.
281.00	2.053	9.82799	.09402	.101750	10.63607	2593.	22774.	20181.
282.00	2.122	9.80770	.09701	.101961	10.30866	2728.	22852.	20124.
283.00	2.193	9.78734	.10007	.102173	9.99348	2864.	22931.	20067.
284.00	2.265	9.76689	.10320	.102387	9.69000	3000.	23009.	20010.
285.00	2.340	9.74636	.10641	.102602	9.39769	3136.	23088.	19952.
286.00	2.416	9.72575	.10970	.102820	9.11607	3273.	23166.	19893.
287.00	2.494	9.70506	.11306	.103039	8.84468	3410.	23245.	19835.
288.00	2.574	9.68428	.11651	.103260	8.58307	3547.	23323.	19776.
289.00	2.656	9.66341	.12004	.103483	8.33082	3685.	23402.	19717.
290.00	2.740	9.64246	.12365	.103708	8.08755	3823.	23480.	19657.
291.00	2.826	9.62142	.12734	.103935	7.85286	3962.	23558.	19597.
292.00	2.914	9.60030	.13112	.104163	7.62640	4100.	23636.	19536.
293.00	3.004	9.57908	.13499	.104394	7.40783	4240.	23715.	19475.
294.00	3.096	9.55777	.13895	.104627	7.19681	4379.	23793.	19414.
295.00	3.190	9.53636	.14300	.104862	6.99304	4519.	23871.	19352.
296.00	3.286	9.51486	.14714	.105099	6.79622	4659.	23949.	19290.
297.00	3.385	9.49327	.15138	.105338	6.60607	4800.	24027.	19227.
298.00	3.485	9.47158	.15571	.105579	6.42232	4941.	24104.	19164.
299.00	3.588	9.44978	.16014	.105823	6.24471	5082.	24182.	19100.
300.00	3.693	9.42789	.16466	.106068	6.07300	5224.	24260.	19036.
301.00	3.801	9.40590	.16929	.106316	5.90695	5366.	24337.	18971.

TABLES AT SATURATION

T	PRESSURE	DENSITIES - MOL/DM3		VOL DM3/MOL		H - J/MOL		HEAT OF VAP
K	BAR	LIQ	VAP	LIQ	VAP	LIQ	VAP	J/MOL
302.00	3.911	9.38380	.17402	.106567	5.74634	5509.	24415.	18906.
303.00	4.023	9.36160	.17884	.106819	5.59148	5652.	24492.	18841.
304.00	4.137	9.33929	.18379	.107075	5.44091	5795.	24570.	18775.
305.00	4.255	9.31688	.18885	.107332	5.29519	5939.	24647.	18708.
306.00	4.374	9.29435	.19402	.107592	5.15413	6083.	24724.	18641.
307.00	4.496	9.27171	.19930	.107855	5.01756	6228.	24800.	18573.
308.00	4.620	9.24896	.20470	.108120	4.88530	6373.	24877.	18505.
309.00	4.747	9.22609	.21021	.108388	4.75718	6518.	24954.	18436.
310.00	4.877	9.20311	.21584	.108659	4.63307	6664.	25030.	18366.
311.00	5.009	9.18000	.22156	.108932	4.51350	6810.	25107.	18297.
312.00	5.144	9.15678	.22743	.109209	4.39702	6957.	25183.	18226.
313.00	5.282	9.13343	.23342	.109488	4.28409	7104.	25260.	18155.
314.00	5.422	9.10996	.23954	.109770	4.17459	7252.	25335.	18084.
315.00	5.565	9.08636	.24580	.110055	4.06838	7400.	25411.	18012.
316.00	5.711	9.06263	.25218	.110343	3.96536	7548.	25487.	17939.
317.00	5.860	9.03877	.25871	.110635	3.86539	7697.	25562.	17865.
318.00	6.011	9.01478	.26537	.110929	3.76839	7846.	25638.	17791.
319.00	6.166	8.99065	.27217	.111227	3.67423	7996.	25713.	17717.
320.00	6.323	8.96638	.27911	.111528	3.58282	8147.	25788.	17641.
321.00	6.483	8.94196	.28620	.111832	3.49406	8297.	25863.	17565.
322.00	6.647	8.91741	.29344	.112140	3.40786	8449.	25937.	17489.
323.00	6.813	8.89271	.30083	.112452	3.32414	8600.	26012.	17411.
324.00	6.982	8.86786	.30838	.112767	3.24279	8753.	26086.	17333.
325.00	7.155	8.84285	.31608	.113086	3.16375	8905.	26160.	17254.
326.00	7.330	8.81770	.32395	.113408	3.08693	9059.	26234.	17175.
327.00	7.509	8.79238	.33198	.113735	3.01226	9212.	26307.	17095.
328.00	7.691	8.76690	.34018	.114065	2.93966	9367.	26380.	17014.
329.00	7.876	8.74126	.34854	.114400	2.86907	9521.	26454.	16932.
330.00	8.065	8.71545	.35709	.114739	2.80042	9677.	26526.	16850.
331.00	8.257	8.68947	.36581	.115082	2.73363	9832.	26599.	16767.
332.00	8.452	8.66332	.37472	.115429	2.66866	9989.	26671.	16683.
333.00	8.650	8.63698	.38381	.115781	2.60544	10145.	26743.	16598.
334.00	8.852	8.61047	.39310	.116138	2.54391	10303.	26815.	16512.
335.00	9.057	8.58377	.40257	.116499	2.48402	10461.	26886.	16426.
336.00	9.266	8.55687	.41225	.116865	2.42571	10619.	26958.	16338.
337.00	9.479	8.52979	.42213	.117236	2.36893	10778.	27028.	16250.
338.00	9.695	8.50250	.43222	.117612	2.31364	10938.	27099.	16161.
339.00	9.914	8.47502	.44252	.117994	2.25978	11098.	27169.	16071.
340.00	10.137	8.44732	.45304	.118381	2.20731	11259.	27239.	15980.
341.00	10.364	8.41941	.46378	.118773	2.15619	11420.	27309.	15888.
342.00	10.595	8.39130	.47483	.119171	2.10601	11582.	27377.	15795.
343.00	10.829	8.36295	.48603	.119575	2.05749	11745.	27446.	15701.
344.00	11.067	8.33437	.49746	.119985	2.01020	11908.	27514.	15607.
345.00	11.309	8.30555	.50914	.120401	1.96409	12071.	27583.	15511.
346.00	11.555	8.27650	.52107	.120824	1.91912	12236.	27650.	15414.
347.00	11.804	8.24720	.53326	.121253	1.87526	12401.	27718.	15317.
348.00	12.058	8.21765	.54571	.121689	1.83247	12566.	27784.	15218.
349.00	12.316	8.18783	.55843	.122132	1.79073	12733.	27851.	15118.
350.00	12.577	8.15775	.57143	.122583	1.74999	12900.	27917.	15017.
351.00	12.843	8.12740	.58471	.123041	1.71024	13067.	27982.	14915.
352.00	13.113	8.09677	.59829	.123506	1.67142	13236.	28047.	14811.
353.00	13.387	8.06584	.61217	.123980	1.63353	13405.	28112.	14707.

T	PRESSURE	DENSITIES - MOL/DM3		VOL DM3/MOL		H - J/MOL		HEAT OF VAP
K	BAR	LIQ	VAP	LIQ	VAP	LIQ	VAP	J/MOL
354.00	13.665	8.03462	.62639	.124461	1.59644	13575.	28176.	14601.
355.00	13.947	8.00308	.64087	.124952	1.56039	13745.	28239.	14494.
356.00	14.234	7.97124	.65570	.125451	1.52508	13916.	28302.	14386.
357.00	14.525	7.93906	.67088	.125959	1.49059	14088.	28364.	14276.
358.00	14.820	7.90655	.68640	.126477	1.45688	14261.	28426.	14165.
359.00	15.119	7.87370	.70228	.127005	1.42393	14435.	28487.	14052.
360.00	15.424	7.84048	.71853	.127543	1.39172	14609.	28548.	13938.
361.00	15.732	7.80689	.73517	.128092	1.36023	14784.	28607.	13823.
362.00	16.045	7.77292	.75220	.128652	1.32943	14960.	28666.	13706.
363.00	16.363	7.73856	.76964	.129223	1.29931	15137.	28725.	13587.
364.00	16.685	7.70378	.78751	.129806	1.26983	15315.	28782.	13467.
365.00	17.012	7.66858	.80581	.130402	1.24099	15494.	28839.	13345.
366.00	17.344	7.63294	.82456	.131011	1.21276	15673.	28895.	13222.
367.00	17.680	7.59683	.84379	.131634	1.18513	15854.	28950.	13096.
368.00	18.021	7.56026	.86350	.132271	1.15807	16035.	29004.	12969.
369.00	18.367	7.52318	.88373	.132922	1.13157	16218.	29057.	12840.
370.00	18.718	7.48560	.90448	.133590	1.10561	16401.	29109.	12708.
371.00	19.074	7.44747	.92578	.134274	1.08017	16586.	29161.	12575.
372.00	19.435	7.40879	.94765	.134975	1.05524	16771.	29211.	12439.
373.00	19.801	7.36952	.97012	.135694	1.03080	16958.	29260.	12302.
374.00	20.172	7.32963	.99322	.136432	1.00683	17146.	29308.	12161.
375.00	20.548	7.28911	1.01697	.137191	.98332	17335.	29354.	12019.
376.00	20.929	7.24792	1.04140	.137971	.96025	17526.	29399.	11874.
377.00	21.316	7.20602	1.06655	.138773	.93761	17717.	29443.	11726.
378.00	21.708	7.16338	1.09245	.139599	.91538	17911.	29486.	11575.
379.00	22.105	7.11996	1.11914	.140450	.89354	18105.	29527.	11422.
380.00	22.508	7.07572	1.14667	.141328	.87209	18301.	29566.	11265.
381.00	22.917	7.03060	1.17508	.142235	.85101	18499.	29604.	11105.
382.00	23.331	6.98457	1.20442	.143173	.83027	18698.	29639.	10942.
383.00	23.750	6.93756	1.23475	.144143	.80988	18898.	29673.	10775.
384.00	24.176	6.88932	1.26547	.145152	.79022	19101.	29708.	10606.
385.00	24.607	6.84011	1.29782	.146196	.77052	19306.	29738.	10432.
386.00	25.044	6.78972	1.33135	.147282	.75112	19512.	29765.	10253.
387.00	25.486	6.73805	1.36614	.148411	.73199	19721.	29791.	10070.
388.00	25.935	6.68500	1.40227	.149589	.71313	19932.	29813.	9881.
389.00	26.390	6.63048	1.43986	.150819	.69451	20145.	29833.	9688.
390.00	26.851	6.57435	1.47902	.152106	.67613	20361.	29850.	9488.
391.00	27.319	6.51647	1.51987	.153457	.65795	20580.	29863.	9283.
392.00	27.793	6.45669	1.56258	.154878	.63997	20802.	29872.	9071.
393.00	28.273	6.39483	1.60733	.156376	.62215	21027.	29878.	8851.
394.00	28.760	6.33065	1.65431	.157962	.60448	21256.	29879.	8623.
395.00	29.253	6.26392	1.70377	.159644	.58694	21488.	29875.	8387.
396.00	29.754	6.19433	1.75599	.161438	.56948	21725.	29866.	8140.
397.00	30.261	6.12152	1.81132	.163358	.55208	21968.	29850.	7883.
398.00	30.775	6.04504	1.87017	.165425	.53471	22215.	29828.	7612.
399.00	31.297	5.96436	1.93307	.167662	.51731	22469.	29797.	7328.
400.00	31.826	5.87880	2.00066	.170103	.49984	22731.	29757.	7026.
401.00	32.362	5.78746	2.07377	.172787	.48221	23001.	29707.	6705.
402.00	32.907	5.68920	2.15351	.175772	.46436	23282.	29643.	6361.
403.00	33.459	5.58244	2.24137	.179133	.44616	23576.	29563.	5987.
404.00	34.020	5.46494	2.33946	.182985	.42745	23886.	29464.	5578.
405.00	34.589	5.33339	2.45094	.187498	.40801	24218.	29340.	5122.

TABLES AT SATURATION

T	PRESSURE	DENSITIES - LB/FT3		VOL FT3/LB		H - BTU/LB		HEAT OF VAP
F	PSI	LIQ	VAP	LIQ	VAP	LIQ	VAP	BTU/LB
-40.00	4.18	38.91609	.05469	.025696	18.28643	-26.30	140.96	167.26
-38.00	4.42	38.84528	.05761	.025743	17.35843	-25.30	141.59	166.88
-36.00	4.67	38.77429	.06065	.025790	16.48693	-24.29	142.21	166.50
-34.00	4.93	38.70314	.06382	.025838	15.66797	-23.28	142.84	166.12
-32.00	5.21	38.63180	.06712	.025885	14.89790	-22.27	143.47	165.73
-30.00	5.50	38.56028	.07055	.025933	14.17335	-21.25	144.10	165.35
-28.00	5.80	38.48857	.07412	.025982	13.49121	-20.23	144.73	164.96
-26.00	6.11	38.41667	.07783	.026030	12.84862	-19.21	145.36	164.57
-24.00	6.44	38.34458	.08168	.026079	12.24292	-18.19	145.99	164.18
-22.00	6.78	38.27229	.08568	.026129	11.67167	-17.16	146.62	163.79
-20.00	7.13	38.19979	.08983	.026178	11.13258	-16.14	147.26	163.39
-18.00	7.50	38.12709	.09413	.026228	10.62357	-15.11	147.89	163.00
-16.00	7.88	38.05418	.09859	.026278	10.14268	-14.08	148.53	162.60
-14.00	8.28	37.98106	.10322	.026329	9.68811	-13.04	149.16	162.20
-12.00	8.70	37.90772	.10801	.026380	9.25819	-12.00	149.80	161.80
-10.00	9.13	37.83416	.11298	.026431	8.85136	-10.96	150.44	161.40
-8.00	9.58	37.76037	.11812	.026483	8.46622	-9.92	151.08	161.00
-6.00	10.04	37.68635	.12344	.026535	8.10131	-8.88	151.72	160.60
-4.00	10.52	37.61210	.12894	.026587	7.75550	-7.83	152.36	160.19
-2.00	11.02	37.53761	.13463	.026640	7.42759	-6.79	153.00	159.78
.00	11.54	37.46288	.14052	.026693	7.11650	-5.73	153.64	159.37
2.00	12.08	37.38791	.14660	.026747	6.82122	-4.68	154.28	158.96
4.00	12.64	37.31269	.15289	.026801	6.54081	-3.63	154.92	158.55
6.00	13.21	37.23721	.15938	.026855	6.27439	-2.57	155.56	158.13
8.00	13.81	37.16148	.16608	.026910	6.02116	-1.51	156.21	157.72
10.00	14.43	37.08548	.17300	.026965	5.78034	-.45	156.85	157.30
12.00	15.07	37.00922	.18014	.027020	5.55123	.62	157.49	156.88
14.00	15.73	36.93269	.18751	.027076	5.33315	1.69	158.14	156.45
16.00	16.41	36.85589	.19510	.027133	5.12549	2.76	158.78	156.03
18.00	17.12	36.77881	.20294	.027190	4.92766	3.83	159.43	155.60
20.00	17.85	36.70144	.21101	.027247	4.73911	4.90	160.07	155.17
22.00	18.60	36.62380	.21933	.027305	4.55933	5.98	160.72	154.74
24.00	19.38	36.54585	.22790	.027363	4.38784	7.06	161.37	154.31
26.00	20.19	36.46762	.23673	.027422	4.22420	8.14	162.01	153.87
28.00	21.01	36.38908	.24582	.027481	4.06797	9.23	162.66	153.43
30.00	21.87	36.31024	.25518	.027540	3.91877	10.31	163.31	152.99
32.00	22.75	36.23109	.26481	.027601	3.77622	11.40	163.95	152.55
34.00	23.66	36.15163	.27473	.027661	3.63998	12.50	164.60	152.10
36.00	24.59	36.07185	.28492	.027722	3.50971	13.59	165.25	151.65
38.00	25.56	35.99175	.29541	.027784	3.38510	14.69	165.89	151.20
40.00	26.55	35.91132	.30620	.027846	3.26587	15.79	166.54	150.75
42.00	27.57	35.83055	.31729	.027909	3.15174	16.90	167.19	150.29
44.00	28.62	35.74945	.32868	.027972	3.04245	18.00	167.83	149.83
46.00	29.70	35.66800	.34040	.028036	2.93776	19.11	168.48	149.36
48.00	30.81	35.58621	.35243	.028101	2.83744	20.23	169.12	148.90
50.00	31.96	35.50406	.36479	.028166	2.74128	21.34	169.77	148.43
52.00	33.13	35.42155	.37749	.028231	2.64906	22.46	170.42	147.95
54.00	34.34	35.33868	.39053	.028298	2.56061	23.58	171.06	147.48
56.00	35.58	35.25544	.40392	.028364	2.47573	24.71	171.71	147.00
58.00	36.86	35.17182	.41767	.028432	2.39426	25.84	172.35	146.52
60.00	38.17	35.08782	.43177	.028500	2.31603	26.97	173.00	146.03
62.00	39.51	35.00344	.44625	.028569	2.24089	28.10	173.64	145.54

TABLES AT SATURATION

T F	PRESSURE PSI	DENSITIES - LB/FT3 LIQ	VAP	VOL FT3/LB LIQ	VAP	H - BTU/LB LIQ	VAP	HEAT OF VAP BTU/LB
64.00	40.89	34.91865	.46111	.028638	2.16870	29.24	174.28	145.04
66.00	42.31	34.83347	.47635	.028708	2.09931	30.38	174.93	144.55
68.00	43.76	34.74789	.49198	.028779	2.03261	31.53	175.57	144.04
70.00	45.25	34.66189	.50801	.028850	1.96846	32.67	176.21	143.54
72.00	46.78	34.57547	.52445	.028922	1.90675	33.82	176.85	143.03
74.00	48.35	34.48862	.54131	.028995	1.84736	34.98	177.49	142.51
76.00	49.95	34.40134	.55860	.029069	1.79020	36.14	178.13	142.00
78.00	51.60	34.31362	.57631	.029143	1.73517	37.30	178.77	141.47
80.00	53.29	34.22546	.59447	.029218	1.68216	38.46	179.41	140.95
82.00	55.01	34.13684	.61308	.029294	1.63110	39.63	180.05	140.42
84.00	56.78	34.04775	.63215	.029371	1.58190	40.80	180.69	139.88
86.00	58.60	33.95819	.65164	.029448	1.53460	41.98	181.32	139.34
88.00	60.45	33.86816	.67168	.029526	1.48880	43.16	181.96	138.80
90.00	62.35	33.77764	.69221	.029605	1.44464	44.34	182.59	138.25
92.00	64.29	33.68663	.71325	.029685	1.40204	45.53	183.22	137.70
94.00	66.28	33.59511	.73479	.029766	1.36094	46.72	183.86	137.14
96.00	68.31	33.50308	.75685	.029848	1.32127	47.91	184.49	136.57
98.00	70.39	33.41053	.77944	.029931	1.28298	49.11	185.12	136.00
100.00	72.52	33.31743	.80244	.030014	1.24620	50.32	185.75	135.43
102.00	74.69	33.22380	.82610	.030099	1.21051	51.52	186.37	134.85
104.00	76.91	33.12962	.85032	.030184	1.17603	52.73	187.00	134.27
106.00	79.18	33.03488	.87511	.030271	1.14271	53.95	187.62	133.68
108.00	81.50	32.93956	.90049	.030359	1.11050	55.16	188.25	133.08
110.00	83.87	32.84366	.92647	.030447	1.07936	56.39	188.87	132.48
112.00	86.29	32.74717	.95307	.030537	1.04924	57.61	189.49	131.88
114.00	88.76	32.65007	.98029	.030628	1.02011	58.84	190.11	131.26
116.00	91.29	32.55235	1.00814	.030720	.99192	60.08	190.72	130.64
118.00	93.86	32.45400	1.03665	.030813	.96464	61.32	191.34	130.02
120.00	96.50	32.35501	1.06583	.030907	.93824	62.56	191.95	129.39
122.00	99.18	32.25536	1.09569	.031003	.91267	63.81	192.56	128.75
124.00	101.92	32.15504	1.12624	.031099	.88791	65.06	193.17	128.11
126.00	104.72	32.05403	1.15751	.031197	.86392	66.32	193.78	127.46
128.00	107.57	31.95233	1.18951	.031297	.84068	67.58	194.39	126.81
130.00	110.48	31.84991	1.22225	.031397	.81816	68.85	194.99	126.14
132.00	113.44	31.74676	1.25575	.031499	.79634	70.12	195.59	125.47
134.00	116.47	31.64286	1.29003	.031603	.77517	71.39	196.19	124.80
136.00	119.55	31.53820	1.32511	.031708	.75465	72.67	196.79	124.11
138.00	122.69	31.43276	1.36101	.031814	.73475	73.96	197.38	123.42
140.00	125.90	31.32651	1.39774	.031922	.71544	75.25	197.97	122.72
142.00	129.16	31.21945	1.43533	.032031	.69670	76.54	198.56	122.02
144.00	132.49	31.11156	1.47380	.032142	.67852	77.84	199.15	121.31
146.00	135.88	31.00280	1.51316	.032255	.66087	79.15	199.73	120.59
148.00	139.33	30.89316	1.55345	.032370	.64373	80.46	200.32	119.86
150.00	142.85	30.78262	1.59468	.032486	.62708	81.77	200.89	119.12
152.00	146.43	30.67116	1.63688	.032604	.61092	83.09	201.47	118.37
154.00	150.08	30.55875	1.68007	.032724	.59521	84.42	202.04	117.62
156.00	153.80	30.44540	1.72428	.032846	.57985	85.75	202.60	116.85
158.00	157.58	30.33101	1.76981	.032970	.56503	87.09	203.17	116.08
160.00	161.43	30.21559	1.81612	.033095	.55063	88.43	203.73	115.30
162.00	165.35	30.09912	1.86353	.033224	.53662	89.78	204.29	114.51
164.00	169.33	29.98155	1.91207	.033354	.52299	91.13	204.85	113.72
166.00	173.39	29.86287	1.96177	.033486	.50974	92.49	205.40	112.91

TABLES AT SATURATION

T	PRESSURE	DENSITIES - LB/FT3		VOL FT3/LB		H - BTU/LB		HEAT OF VAP
F	PSI	LIQ	VAP	LIQ	VAP	LIQ	VAP	BTU/LB
168.00	177.52	29.74302	2.01259	.033621	.49687	93.86	205.95	112.09
170.00	181.72	29.62202	2.06482	.033759	.48430	95.23	206.49	111.26
172.00	185.99	29.49978	2.11823	.033899	.47209	96.61	207.03	110.42
174.00	190.34	29.37628	2.17295	.034041	.46020	97.99	207.56	109.57
176.00	194.76	29.25148	2.22903	.034186	.44863	99.38	208.09	108.71
178.00	199.26	29.12534	2.28650	.034334	.43735	100.78	208.62	107.84
180.00	203.83	28.99781	2.34540	.034485	.42637	102.18	209.14	106.96
182.00	208.48	28.86884	2.40580	.034639	.41566	103.59	209.65	106.06
184.00	213.20	28.73840	2.46773	.034797	.40523	105.01	210.16	105.15
186.00	218.01	28.60642	2.53125	.034957	.39506	106.44	210.67	104.23
188.00	222.89	28.47284	2.59642	.035121	.38515	107.87	211.16	103.30
190.00	227.85	28.33762	2.66330	.035289	.37547	109.31	211.66	102.35
192.00	232.90	28.20069	2.73194	.035460	.36604	110.75	212.14	101.39
194.00	238.02	28.06197	2.80241	.035635	.35684	112.21	212.62	100.41
196.00	243.23	27.92141	2.87479	.035815	.34785	113.67	213.09	99.42
198.00	248.52	27.77892	2.94916	.035999	.33908	115.14	213.56	98.41
200.00	253.90	27.63443	3.02558	.036187	.33051	116.62	214.01	97.39
202.00	259.36	27.48785	3.10415	.036380	.32215	118.11	214.46	96.35
204.00	264.91	27.33909	3.18497	.036578	.31398	119.61	214.90	95.29
206.00	270.55	27.18804	3.26811	.036781	.30599	121.12	215.33	94.22
208.00	276.27	27.03461	3.35371	.036990	.29818	122.63	215.76	93.12
210.00	282.09	26.87867	3.44186	.037204	.29054	124.16	216.17	92.01
212.00	287.99	26.72011	3.53269	.037425	.28307	125.70	216.57	90.87
214.00	293.99	26.55879	3.62634	.037652	.27576	127.24	216.96	89.72
216.00	300.08	26.39457	3.72295	.037887	.26860	128.80	217.34	88.54
218.00	306.26	26.22728	3.82268	.038128	.26160	130.37	217.71	87.34
220.00	312.54	26.05676	3.92570	.038378	.25473	131.95	218.06	86.11
222.00	318.91	25.88281	4.03219	.038636	.24800	133.55	218.40	84.85
224.00	325.38	25.70523	4.14236	.038903	.24141	135.16	218.73	83.57
226.00	331.95	25.52380	4.25644	.039179	.23494	136.78	219.04	82.26
228.00	338.62	25.33826	4.37469	.039466	.22859	138.42	219.33	80.92
230.00	345.39	25.14833	4.49736	.039764	.22235	140.07	219.61	79.54
232.00	352.27	24.95298	4.62224	.040075	.21635	141.74	219.89	78.15
234.00	359.24	24.75308	4.75416	.040399	.21034	143.43	220.13	76.70
236.00	366.33	24.54773	4.89148	.040737	.20444	145.13	220.35	75.22
238.00	373.51	24.33647	5.03462	.041091	.19862	146.86	220.55	73.69
240.00	380.81	24.11876	5.18407	.041461	.19290	148.60	220.72	72.11
242.00	388.22	23.89404	5.34039	.041851	.18725	150.37	220.86	70.49
244.00	395.74	23.66163	5.50422	.042263	.18168	152.17	220.97	68.80
246.00	403.37	23.42074	5.67630	.042697	.17617	153.99	221.05	67.06
248.00	411.12	23.17044	5.85752	.043158	.17072	155.85	221.09	65.25
250.00	418.99	22.90966	6.04892	.043650	.16532	157.73	221.09	63.36
252.00	426.98	22.63709	6.25173	.044175	.15996	159.66	221.05	61.39
254.00	435.09	22.35113	6.46747	.044740	.15462	161.62	220.95	59.33
256.00	443.33	22.04982	6.69800	.045352	.14930	163.64	220.79	57.15
258.00	451.69	21.73072	6.94565	.046018	.14398	165.71	220.56	54.86
260.00	460.19	21.39069	7.21339	.046749	.13863	167.85	220.26	52.41
262.00	468.82	21.02560	7.50515	.047561	.13324	170.06	219.85	49.79
264.00	477.59	20.62988	7.82621	.048473	.12778	172.37	219.33	46.96
266.00	486.50	20.19568	8.18401	.049516	.12219	174.79	218.66	43.87
268.00	495.56	19.71145	8.58952	.050732	.11642	177.38	217.81	40.43
270.00	504.78	19.15891	9.06002	.052195	.11038	180.17	216.70	36.53

.01 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV - - KJ/KG /DEG K) - -	CP	S*	H* - - KJ/KG - -	U	VEL SND M/SEC
250.00	.281	.40301-4	.035469	1.301	1.446	1.673	352.38	316.76	199.
260.00	.270	.38723-4	.036920	1.345	1.490	1.731	367.06	330.00	202.
270.00	.260	.37266-4	.038369	1.391	1.536	1.788	382.19	343.69	206.
280.00	.250	.35915-4	.039817	1.437	1.582	1.844	397.78	357.84	209.
290.00	.242	.34659-4	.041263	1.484	1.628	1.901	413.82	372.45	213.
300.00	.234	.33489-4	.042707	1.530	1.675	1.957	430.34	387.53	216.
310.00	.226	.32397-4	.044151	1.577	1.722	2.012	447.32	403.07	220.
320.00	.219	.31373-4	.045593	1.625	1.769	2.068	464.77	419.09	223.
330.00	.212	.30413-4	.047034	1.672	1.816	2.123	482.70	435.58	226.
340.00	.206	.29510-4	.048475	1.719	1.863	2.178	501.09	452.54	229.
350.00	.200	.28660-4	.049914	1.766	1.910	2.233	519.96	469.97	232.
360.00	.194	.27858-4	.051353	1.813	1.957	2.287	539.30	487.87	235.
370.00	.189	.27099-4	.052792	1.860	2.004	2.341	559.10	506.24	238.
380.00	.184	.26381-4	.054230	1.906	2.050	2.395	579.37	525.07	241.
390.00	.179	.25701-4	.055667	1.952	2.096	2.449	600.10	544.37	244.
400.00	.175	.25054-4	.057104	1.998	2.142	2.503	621.29	564.13	247.
410.00	.171	.24440-4	.058540	2.043	2.187	2.556	642.93	584.33	250.
420.00	.167	.23855-4	.059976	2.088	2.231	2.609	665.02	604.99	253.
430.00	.163	.23298-4	.061412	2.132	2.275	2.663	687.55	626.09	256.
440.00	.159	.22766-4	.062848	2.175	2.319	2.715	710.52	647.63	259.
450.00	.155	.22258-4	.064283	2.218	2.362	2.768	733.93	669.60	262.
460.00	.152	.21772-4	.065718	2.261	2.404	2.820	757.76	692.00	264.
470.00	.149	.21307-4	.067152	2.302	2.446	2.872	782.01	714.82	267.
480.00	.146	.20862-4	.068587	2.344	2.487	2.924	806.67	738.05	270.
490.00	.143	.20434-4	.070021	2.384	2.527	2.976	831.75	761.69	272.
500.00	.140	.20024-4	.071455	2.424	2.567	3.028	857.22	785.73	275.
510.00	.137	.19631-4	.072889	2.463	2.607	3.079	883.09	810.17	278.
520.00	.134	.19252-4	.074323	2.502	2.645	3.130	909.35	835.00	280.
530.00	.132	.18888-4	.075756	2.540	2.683	3.180	935.99	860.21	283.
540.00	.130	.18537-4	.077190	2.577	2.720	3.231	963.01	885.79	285.
550.00	.127	.18199-4	.078623	2.614	2.757	3.281	990.40	911.75	288.
560.00	.125	.17874-4	.080056	2.650	2.793	3.331	1018.15	938.07	290.
570.00	.123	.17559-4	.081489	2.685	2.829	3.381	1046.26	964.75	293.
580.00	.121	.17256-4	.082922	2.720	2.864	3.431	1074.73	991.78	295.
590.00	.119	.16963-4	.084355	2.755	2.898	3.480	1103.53	1019.16	298.
600.00	.117	.16680-4	.085788	2.789	2.932	3.529	1132.68	1046.88	300.
610.00	.115	.16406-4	.087220	2.822	2.965	3.577	1162.17	1074.93	303.
620.00	.113	.16141-4	.088653	2.854	2.998	3.626	1191.98	1103.31	305.
630.00	.111	.15884-4	.090085	2.886	3.030	3.674	1222.12	1132.02	307.
640.00	.109	.15635-4	.091518	2.918	3.061	3.722	1252.57	1161.04	310.
650.00	.108	.15394-4	.092950	2.949	3.092	3.770	1283.34	1190.38	312.
660.00	.106	.15161-4	.094382	2.980	3.123	3.817	1314.42	1220.02	315.
670.00	.104	.14934-4	.095814	3.010	3.153	3.864	1345.80	1249.97	317.
680.00	.103	.14714-4	.097246	3.039	3.183	3.911	1377.48	1280.22	319.
690.00	.101	.14501-4	.098679	3.069	3.212	3.958	1409.45	1310.76	321.
700.00	.100	.14293-4	.10011	3.097	3.240	4.004	1441.71	1341.59	324.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

.05 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV - - KJ/KG	CP /DEG K)	S* - -	H* - - KJ/KG	U - -	VEL SND M/SEC
250.00	1.428	.20835-3	.034240	1.304	1.459	1.438	350.63	315.63	196.
260.00	1.370	.19943-3	.035790	1.348	1.502	1.496	365.44	328.94	200.
270.00	1.317	.19131-3	.037325	1.394	1.546	1.554	380.68	342.71	204.
280.00	1.267	.18388-3	.038849	1.439	1.591	1.611	396.37	356.92	207.
290.00	1.222	.17704-3	.040362	1.486	1.636	1.667	412.51	371.58	211.
300.00	1.179	.17072-3	.041868	1.532	1.682	1.724	429.10	386.71	214.
310.00	1.140	.16487-3	.043366	1.579	1.729	1.780	446.15	402.30	218.
320.00	1.103	.15942-3	.044858	1.626	1.775	1.835	463.67	418.36	221.
330.00	1.069	.15433-3	.046344	1.673	1.822	1.891	481.66	434.88	225.
340.00	1.037	.14957-3	.047826	1.720	1.868	1.946	500.11	451.88	228.
350.00	1.006	.14511-3	.049304	1.767	1.915	2.001	519.03	469.34	231.
360.00	.978	.14092-3	.050778	1.814	1.962	2.055	538.41	487.27	234.
370.00	.951	.13697-3	.052249	1.861	2.008	2.110	558.26	505.67	237.
380.00	.925	.13324-3	.053717	1.907	2.054	2.164	578.57	524.53	241.
390.00	.901	.12971-3	.055182	1.953	2.100	2.218	599.33	543.85	244.
400.00	.878	.12637-3	.056645	1.999	2.145	2.271	620.56	563.62	247.
410.00	.856	.12321-3	.058106	2.044	2.190	2.325	642.23	583.85	250.
420.00	.836	.12020-3	.059565	2.088	2.234	2.378	664.35	604.53	252.
430.00	.816	.11733-3	.061022	2.132	2.278	2.431	686.91	625.65	255.
440.00	.797	.11461-3	.062478	2.176	2.321	2.484	709.91	647.20	258.
450.00	.779	.11201-3	.063932	2.219	2.364	2.537	733.34	669.19	261.
460.00	.762	.10952-3	.065385	2.261	2.406	2.589	757.19	691.60	264.
470.00	.746	.10715-3	.066837	2.303	2.448	2.641	781.46	714.43	267.
480.00	.730	.10488-3	.068287	2.344	2.489	2.693	806.15	737.67	269.
490.00	.715	.10270-3	.069736	2.384	2.529	2.745	831.24	761.33	272.
500.00	.701	.10061-3	.071185	2.424	2.569	2.797	856.73	785.38	275.
510.00	.687	.98611-4	.072632	2.464	2.608	2.848	882.62	809.83	277.
520.00	.674	.96688-4	.074079	2.502	2.647	2.899	908.90	834.67	280.
530.00	.661	.94839-4	.075525	2.540	2.685	2.950	935.56	859.89	283.
540.00	.648	.93060-4	.076970	2.577	2.722	3.000	962.59	885.48	285.
550.00	.637	.91348-4	.078415	2.614	2.759	3.050	989.99	911.45	288.
560.00	.625	.89698-4	.079859	2.650	2.795	3.100	1017.76	937.78	290.
570.00	.614	.88107-4	.081302	2.686	2.830	3.150	1045.88	964.46	293.
580.00	.603	.86572-4	.082745	2.721	2.865	3.200	1074.36	991.50	295.
590.00	.593	.85090-4	.084187	2.755	2.899	3.249	1103.18	1018.88	298.
600.00	.583	.83658-4	.085629	2.789	2.933	3.298	1132.34	1046.61	300.
610.00	.574	.82274-4	.087071	2.822	2.966	3.347	1161.83	1074.67	303.
620.00	.564	.80935-4	.088511	2.855	2.999	3.395	1191.66	1103.06	305.
630.00	.555	.79640-4	.089952	2.887	3.031	3.444	1221.80	1131.77	307.
640.00	.547	.78385-4	.091392	2.918	3.062	3.492	1252.27	1160.80	310.
650.00	.538	.77170-4	.092832	2.949	3.093	3.539	1283.04	1190.14	312.
660.00	.530	.75992-4	.094271	2.980	3.124	3.587	1314.13	1219.79	314.
670.00	.522	.74850-4	.095711	3.010	3.154	3.634	1345.52	1249.74	317.
680.00	.514	.73741-4	.097149	3.040	3.183	3.681	1377.21	1280.00	319.
690.00	.507	.72666-4	.098588	3.069	3.213	3.728	1409.19	1310.54	321.
700.00	.500	.71621-4	.10003	3.097	3.241	3.774	1441.45	1341.38	324.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

.08 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND
				- - KJ/KG /DEG K) - -			- - KJ/KG	- -	M/SEC
250.00	605.857	.74322	.69697	1.635	2.175	-.098	-25.08	-25.21	963.
255.50	599.942	.71781	.66191	1.646	2.198	-.050	-13.05	-13.18	940.
255.50	2.262	.33407-3	.034159	1.332	1.495	1.399	357.38	322.01	196.
260.00	2.219	.32711-3	.034893	1.351	1.513	1.426	364.15	328.09	198.
270.00	2.129	.31280-3	.036506	1.396	1.556	1.484	379.49	341.92	202.
280.00	2.047	.29988-3	.038096	1.442	1.599	1.541	395.27	356.19	206.
290.00	1.971	.28813-3	.039667	1.488	1.644	1.598	411.48	370.90	209.
300.00	1.902	.27736-3	.041222	1.534	1.689	1.654	428.14	386.07	213.
310.00	1.837	.26744-3	.042765	1.581	1.734	1.710	445.26	401.70	217.
320.00	1.776	.25827-3	.044297	1.628	1.780	1.766	462.83	417.79	220.
330.00	1.720	.24976-3	.045820	1.675	1.826	1.822	480.86	434.35	224.
340.00	1.667	.24183-3	.047334	1.722	1.873	1.877	499.36	451.38	227.
350.00	1.618	.23442-3	.048842	1.768	1.919	1.932	518.32	468.86	230.
360.00	1.571	.22748-3	.050343	1.815	1.965	1.987	537.74	486.82	233.
370.00	1.527	.22095-3	.051839	1.862	2.011	2.041	557.62	505.24	237.
380.00	1.486	.21481-3	.053330	1.908	2.057	2.095	577.96	524.12	240.
390.00	1.447	.20901-3	.054817	1.954	2.102	2.149	598.76	543.45	243.
400.00	1.409	.20354-3	.056300	1.999	2.147	2.203	620.00	563.25	246.
410.00	1.374	.19835-3	.057780	2.044	2.192	2.257	641.70	583.49	249.
420.00	1.341	.19343-3	.059256	2.089	2.236	2.310	663.85	604.18	252.
430.00	1.309	.18876-3	.060729	2.133	2.280	2.363	686.43	625.31	255.
440.00	1.279	.18431-3	.062200	2.176	2.323	2.416	709.45	646.88	258.
450.00	1.250	.18007-3	.063669	2.219	2.366	2.469	732.89	668.87	261.
460.00	1.222	.17603-3	.065135	2.262	2.408	2.521	756.77	691.30	263.
470.00	1.196	.17218-3	.066600	2.303	2.450	2.574	781.05	714.14	266.
480.00	1.170	.16849-3	.068062	2.344	2.491	2.626	805.76	737.39	269.
490.00	1.146	.16496-3	.069523	2.385	2.531	2.677	830.86	761.06	272.
500.00	1.123	.16157-3	.070982	2.425	2.570	2.729	856.37	785.12	274.
510.00	1.100	.15833-3	.072440	2.464	2.610	2.780	882.27	809.57	277.
520.00	1.079	.15522-3	.073897	2.502	2.648	2.831	908.56	834.42	280.
530.00	1.058	.15222-3	.075352	2.540	2.686	2.882	935.23	859.64	282.
540.00	1.039	.14935-3	.076806	2.578	2.723	2.932	962.27	885.25	285.
550.00	1.020	.14658-3	.078259	2.614	2.760	2.983	989.69	911.22	287.
560.00	1.001	.14391-3	.079711	2.650	2.796	3.033	1017.46	937.55	290.
570.00	.983	.14134-3	.081162	2.686	2.831	3.083	1045.59	964.25	292.
580.00	.966	.13887-3	.082612	2.721	2.866	3.132	1074.08	991.29	295.
590.00	.950	.13647-3	.084062	2.755	2.900	3.181	1102.91	1018.68	297.
600.00	.934	.13416-3	.085510	2.789	2.934	3.230	1132.08	1046.41	300.
610.00	.918	.13193-3	.086958	2.822	2.967	3.279	1161.58	1074.47	302.
620.00	.903	.12978-3	.088406	2.855	2.999	3.328	1191.41	1102.86	305.
630.00	.889	.12769-3	.089852	2.887	3.031	3.376	1221.57	1131.58	307.
640.00	.875	.12567-3	.091298	2.918	3.063	3.424	1252.04	1160.61	310.
650.00	.861	.12371-3	.092744	2.949	3.094	3.472	1282.82	1189.96	312.
660.00	.848	.12181-3	.094188	2.980	3.124	3.519	1313.91	1219.61	314.
670.00	.836	.11997-3	.095633	3.010	3.154	3.566	1345.31	1249.57	317.
680.00	.823	.11819-3	.097077	3.040	3.184	3.613	1377.00	1279.83	319.
690.00	.811	.11646-3	.098520	3.069	3.213	3.660	1408.99	1310.38	321.
700.00	.800	.11478-3	.099963	3.097	3.242	3.706	1441.26	1341.21	323.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

.10 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV - - KJ/KG	CP /DEG K) - -	S*	H* - - KJ/KG	U - -	VEL SND M/SEC
250.00	605.885	.74361	.69750	1.635	2.175	-.098	-25.06	-25.22	963.
260.00	595.058	.69722	.63372	1.655	2.218	-.012	-3.10	-3.27	922.
261.06	593.892	.69228	.62698	1.657	2.223	-.003	-.75	-.92	917.
261.06	2.784	.41412-3	.034449	1.359	1.526	1.398	364.85	328.94	197.
270.00	2.681	.39707-3	.035942	1.398	1.563	1.450	378.66	341.37	200.
280.00	2.576	.37993-3	.037580	1.443	1.606	1.507	394.51	355.68	204.
290.00	2.479	.36445-3	.039193	1.489	1.649	1.564	410.78	370.43	208.
300.00	2.389	.35037-3	.040784	1.535	1.693	1.621	427.49	385.64	212.
310.00	2.307	.33748-3	.042359	1.582	1.738	1.677	444.65	401.30	216.
320.00	2.230	.32561-3	.043919	1.629	1.784	1.733	462.26	417.41	219.
330.00	2.158	.31463-3	.045466	1.675	1.830	1.789	480.33	433.99	223.
340.00	2.091	.30443-3	.047004	1.722	1.876	1.844	498.85	451.04	226.
350.00	2.028	.29493-3	.048532	1.769	1.922	1.899	517.84	468.54	230.
360.00	1.970	.28605-3	.050052	1.816	1.968	1.954	537.29	486.51	233.
370.00	1.914	.27772-3	.051565	1.862	2.013	2.008	557.19	504.95	236.
380.00	1.862	.26989-3	.053072	1.908	2.059	2.063	577.55	523.84	239.
390.00	1.812	.26251-3	.054573	1.954	2.104	2.117	598.37	543.19	242.
400.00	1.765	.25555-3	.056069	2.000	2.149	2.171	619.64	562.99	245.
410.00	1.721	.24897-3	.057561	2.045	2.194	2.224	641.35	583.25	249.
420.00	1.679	.24273-3	.059049	2.089	2.238	2.278	663.51	603.95	251.
430.00	1.639	.23680-3	.060534	2.133	2.282	2.331	686.11	625.09	254.
440.00	1.601	.23118-3	.062015	2.177	2.325	2.384	709.14	646.66	257.
450.00	1.564	.22582-3	.063493	2.220	2.367	2.436	732.60	668.67	260.
460.00	1.529	.22071-3	.064968	2.262	2.409	2.489	756.48	691.10	263.
470.00	1.496	.21584-3	.066441	2.303	2.451	2.541	780.78	713.95	266.
480.00	1.464	.21118-3	.067912	2.345	2.492	2.593	805.49	737.21	269.
490.00	1.434	.20673-3	.069380	2.385	2.532	2.645	830.61	760.87	271.
500.00	1.405	.20246-3	.070847	2.425	2.571	2.697	856.13	784.94	274.
510.00	1.377	.19837-3	.072312	2.464	2.610	2.748	882.04	809.40	277.
520.00	1.350	.19445-3	.073775	2.503	2.649	2.799	908.33	834.25	279.
530.00	1.324	.19068-3	.075236	2.540	2.687	2.850	935.01	859.48	282.
540.00	1.299	.18706-3	.076696	2.578	2.724	2.900	962.06	885.09	285.
550.00	1.275	.18358-3	.078155	2.614	2.760	2.951	989.48	911.07	287.
560.00	1.252	.18022-3	.079613	2.651	2.796	3.001	1017.26	937.41	290.
570.00	1.230	.17699-3	.081069	2.686	2.832	3.050	1045.40	964.10	292.
580.00	1.209	.17388-3	.082524	2.721	2.866	3.100	1073.89	991.15	295.
590.00	1.188	.17087-3	.083978	2.755	2.901	3.149	1102.73	1018.54	297.
600.00	1.168	.16797-3	.085431	2.789	2.934	3.198	1131.90	1046.27	300.
610.00	1.148	.16516-3	.086884	2.822	2.967	3.247	1161.41	1074.34	302.
620.00	1.130	.16245-3	.088335	2.855	3.000	3.296	1191.25	1102.74	305.
630.00	1.112	.15983-3	.089786	2.887	3.032	3.344	1221.41	1131.46	307.
640.00	1.094	.15729-3	.091236	2.918	3.063	3.392	1251.88	1160.49	309.
650.00	1.077	.15483-3	.092685	2.949	3.094	3.440	1282.67	1189.84	312.
660.00	1.061	.15245-3	.094133	2.980	3.125	3.487	1313.77	1219.50	314.
670.00	1.045	.15015-3	.095581	3.010	3.155	3.534	1345.17	1249.46	317.
680.00	1.029	.14791-3	.097028	3.040	3.184	3.581	1376.86	1279.72	319.
690.00	1.014	.14574-3	.098475	3.069	3.213	3.628	1408.85	1310.27	321.
700.00	1.000	.14363-3	.099921	3.097	3.242	3.674	1441.13	1341.11	323.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

.101325 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND
				- - KJ/KG /DEG K) - -			- - KJ/KG	- -	M/SEC
250.00	605.887	.74364	.69754	1.635	2.175	-.098	-25.06	-25.23	963.
260.00	595.060	.69725	.63376	1.655	2.218	-.012	-3.10	-3.27	922.
261.39	593.522	.69073	.62487	1.658	2.224	.000	.00	-.17	916.
261.39	2.819	.41943-3	.034465	1.360	1.528	1.398	365.31	329.36	197.
270.00	2.718	.40276-3	.035904	1.398	1.564	1.448	378.61	341.33	200.
280.00	2.611	.38531-3	.037545	1.444	1.606	1.505	394.46	355.65	204.
290.00	2.513	.36957-3	.039161	1.489	1.649	1.562	410.73	370.40	208.
300.00	2.422	.35526-3	.040755	1.535	1.694	1.619	427.45	385.61	212.
310.00	2.338	.34217-3	.042332	1.582	1.739	1.675	444.61	401.27	216.
320.00	2.260	.33011-3	.043894	1.629	1.784	1.731	462.22	417.39	219.
330.00	2.187	.31896-3	.045443	1.675	1.830	1.787	480.29	433.97	223.
340.00	2.119	.30861-3	.046982	1.722	1.876	1.842	498.82	451.01	226.
350.00	2.056	.29897-3	.048511	1.769	1.922	1.897	517.81	468.52	230.
360.00	1.996	.28995-3	.050032	1.816	1.968	1.952	537.26	486.49	233.
370.00	1.940	.28150-3	.051546	1.862	2.013	2.006	557.16	504.93	236.
380.00	1.887	.27356-3	.053054	1.908	2.059	2.061	577.53	523.82	239.
390.00	1.837	.26607-3	.054557	1.954	2.104	2.115	598.34	543.17	242.
400.00	1.789	.25901-3	.056054	2.000	2.149	2.169	619.61	562.98	245.
410.00	1.744	.25233-3	.057547	2.045	2.194	2.222	641.33	583.23	248.
420.00	1.701	.24601-3	.059036	2.089	2.238	2.276	663.49	603.93	251.
430.00	1.661	.24000-3	.060521	2.133	2.282	2.329	686.09	625.07	254.
440.00	1.622	.23429-3	.062003	2.177	2.325	2.382	709.12	646.65	257.
450.00	1.585	.22886-3	.063481	2.220	2.367	2.435	732.58	668.65	260.
460.00	1.550	.22368-3	.064957	2.262	2.409	2.487	756.46	691.08	263.
470.00	1.516	.21874-3	.066431	2.303	2.451	2.539	780.76	713.93	266.
480.00	1.484	.21402-3	.067902	2.345	2.492	2.591	805.48	737.19	269.
490.00	1.453	.20950-3	.069371	2.385	2.532	2.643	830.59	760.86	271.
500.00	1.424	.20518-3	.070838	2.425	2.571	2.695	856.11	784.93	274.
510.00	1.395	.20103-3	.072303	2.464	2.610	2.746	882.02	809.39	277.
520.00	1.368	.19705-3	.073767	2.503	2.649	2.797	908.32	834.24	279.
530.00	1.342	.19324-3	.075229	2.540	2.687	2.848	934.99	859.47	282.
540.00	1.316	.18956-3	.076689	2.578	2.724	2.898	962.05	885.08	285.
550.00	1.292	.18603-3	.078148	2.614	2.760	2.949	989.47	911.06	287.
560.00	1.269	.18263-3	.079606	2.651	2.796	2.999	1017.25	937.40	290.
570.00	1.246	.17936-3	.081063	2.686	2.832	3.049	1045.39	964.09	292.
580.00	1.225	.17620-3	.082518	2.721	2.866	3.098	1073.88	991.14	295.
590.00	1.204	.17315-3	.083973	2.755	2.901	3.147	1102.72	1018.53	297.
600.00	1.183	.17021-3	.085426	2.789	2.934	3.196	1131.89	1046.27	300.
610.00	1.164	.16737-3	.086879	2.822	2.967	3.245	1161.40	1074.33	302.
620.00	1.145	.16462-3	.088330	2.855	3.000	3.294	1191.24	1102.73	305.
630.00	1.126	.16196-3	.089781	2.887	3.032	3.342	1221.40	1131.45	307.
640.00	1.109	.15939-3	.091231	2.918	3.063	3.390	1251.87	1160.48	309.
650.00	1.092	.15690-3	.092681	2.949	3.094	3.438	1282.66	1189.83	312.
660.00	1.075	.15449-3	.094130	2.980	3.125	3.485	1313.76	1219.49	314.
670.00	1.059	.15215-3	.095578	3.010	3.155	3.532	1345.16	1249.45	317.
680.00	1.043	.14988-3	.097025	3.040	3.184	3.579	1376.86	1279.71	319.
690.00	1.028	.14768-3	.098472	3.069	3.213	3.626	1408.85	1310.26	321.
700.00	1.013	.14554-3	.099918	3.097	3.242	3.673	1441.12	1341.10	323.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

.12 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND
				- - KJ/KG /DEG K) - -			- - KJ/KG	- -	M/SEC
250.00	605.914	.74400	.69803	1.635	2.175	-.098	-25.04	-25.24	964.
260.00	595.090	.69758	.63423	1.655	2.218	-.012	-3.08	-3.28	922.
265.81	588.637	.67041	.59730	1.667	2.244	.037	9.88	9.67	897.
265.81	3.301	.49428-3	.034640	1.382	1.554	1.397	371.26	334.91	197.
270.00	3.242	.48426-3	.035362	1.401	1.571	1.421	377.81	340.80	199.
280.00	3.112	.46233-3	.037053	1.445	1.612	1.479	393.73	355.16	203.
290.00	2.992	.44273-3	.038710	1.491	1.655	1.537	410.06	369.96	207.
300.00	2.882	.42502-3	.040340	1.537	1.698	1.593	426.83	385.19	211.
310.00	2.781	.40891-3	.041948	1.583	1.743	1.650	444.03	400.88	215.
320.00	2.687	.39414-3	.043537	1.630	1.788	1.706	461.68	417.03	219.
330.00	2.600	.38054-3	.045110	1.676	1.833	1.762	479.79	433.63	222.
340.00	2.518	.36795-3	.046671	1.723	1.879	1.817	498.35	450.69	226.
350.00	2.442	.35624-3	.048220	1.770	1.924	1.872	517.36	468.22	229.
360.00	2.370	.34533-3	.049759	1.816	1.970	1.927	536.83	486.21	232.
370.00	2.303	.33511-3	.051289	1.863	2.016	1.982	556.76	504.65	236.
380.00	2.240	.32553-3	.052812	1.909	2.061	2.036	577.14	523.56	239.
390.00	2.180	.31652-3	.054328	1.955	2.106	2.090	597.98	542.92	242.
400.00	2.123	.30803-3	.055838	2.000	2.151	2.144	619.27	562.74	245.
410.00	2.069	.30000-3	.057343	2.045	2.195	2.198	641.00	583.00	248.
420.00	2.018	.29240-3	.058842	2.090	2.239	2.251	663.17	603.71	251.
430.00	1.970	.28520-3	.060338	2.134	2.283	2.304	685.78	624.86	254.
440.00	1.924	.27836-3	.061829	2.177	2.326	2.357	708.83	646.44	257.
450.00	1.880	.27186-3	.063317	2.220	2.368	2.410	732.30	668.46	260.
460.00	1.838	.26566-3	.064802	2.262	2.410	2.462	756.20	690.90	263.
470.00	1.798	.25975-3	.066283	2.304	2.452	2.515	780.51	713.75	266.
480.00	1.759	.25411-3	.067762	2.345	2.493	2.567	805.23	737.02	268.
490.00	1.723	.24871-3	.069238	2.385	2.533	2.619	830.36	760.69	271.
500.00	1.687	.24355-3	.070712	2.425	2.572	2.670	855.88	784.77	274.
510.00	1.654	.23860-3	.072183	2.464	2.611	2.721	881.80	809.23	277.
520.00	1.621	.23386-3	.073653	2.503	2.650	2.773	908.10	834.09	279.
530.00	1.590	.22930-3	.075121	2.541	2.687	2.823	934.79	859.32	282.
540.00	1.560	.22492-3	.076587	2.578	2.724	2.874	961.85	884.93	285.
550.00	1.531	.22072-3	.078051	2.615	2.761	2.924	989.28	910.91	287.
560.00	1.504	.21666-3	.079514	2.651	2.797	2.974	1017.07	937.26	290.
570.00	1.477	.21276-3	.080975	2.686	2.832	3.024	1045.21	963.96	292.
580.00	1.451	.20900-3	.082436	2.721	2.867	3.074	1073.71	991.01	295.
590.00	1.426	.20537-3	.083895	2.755	2.901	3.123	1102.55	1018.40	297.
600.00	1.402	.20187-3	.085352	2.789	2.935	3.172	1131.73	1046.14	300.
610.00	1.379	.19849-3	.086809	2.822	2.968	3.221	1161.24	1074.21	302.
620.00	1.356	.19522-3	.088265	2.855	3.000	3.269	1191.08	1102.61	305.
630.00	1.335	.19206-3	.089719	2.887	3.032	3.318	1221.25	1131.33	307.
640.00	1.313	.18900-3	.091173	2.918	3.064	3.366	1251.73	1160.37	309.
650.00	1.293	.18604-3	.092626	2.950	3.095	3.413	1282.52	1189.72	312.
660.00	1.273	.18317-3	.094078	2.980	3.125	3.461	1313.62	1219.38	314.
670.00	1.254	.18039-3	.095529	3.010	3.155	3.508	1345.03	1249.34	316.
680.00	1.236	.17769-3	.096980	3.040	3.185	3.555	1376.73	1279.60	319.
690.00	1.217	.17508-3	.098430	3.069	3.214	3.602	1408.72	1310.16	321.
700.00	1.200	.17254-3	.099879	3.098	3.242	3.648	1441.00	1341.00	323.

H* = H(T) - H(N.B.T.LIQUID) AND
S* = S(T) - S(N.B.T.LIQUID)

.14 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND
				- - KJ/KG /DEG K) - -			- - KJ/KG	- -	M/SEC
250.00	605.943	.74438	.69857	1.635	2.175	-.098	-25.02	-25.25	964.
260.00	595.121	.69794	.63474	1.654	2.218	-.012	-3.06	-3.30	922.
270.00	583.931	.65111	.57133	1.677	2.264	.073	19.34	19.10	878.
269.98	583.954	.65120	.57146	1.677	2.264	.072	19.30	19.06	878.
269.98	3.813	.57471-3	.034762	1.403	1.580	1.397	376.90	340.18	198.
280.00	3.655	.54730-3	.036514	1.448	1.620	1.455	392.93	354.63	202.
290.00	3.512	.52310-3	.038219	1.493	1.661	1.513	409.33	369.47	206.
300.00	3.381	.50141-3	.039889	1.538	1.704	1.570	426.15	384.74	210.
310.00	3.260	.48180-3	.041532	1.584	1.747	1.626	443.40	400.46	214.
320.00	3.149	.46392-3	.043151	1.631	1.792	1.683	461.10	416.63	218.
330.00	3.045	.44752-3	.044752	1.677	1.837	1.738	479.24	433.26	221.
340.00	2.948	.43239-3	.046336	1.724	1.882	1.794	497.83	450.35	225.
350.00	2.858	.41838-3	.047906	1.771	1.927	1.849	516.88	467.89	228.
360.00	2.773	.40533-3	.049464	1.817	1.973	1.904	536.37	485.90	232.
370.00	2.694	.39316-3	.051013	1.863	2.018	1.959	556.33	504.36	235.
380.00	2.619	.38176-3	.052551	1.909	2.063	2.013	576.73	523.28	238.
390.00	2.549	.37105-3	.054082	1.955	2.108	2.067	597.59	542.66	241.
400.00	2.482	.36097-3	.055606	2.001	2.153	2.121	618.89	562.48	245.
410.00	2.419	.35146-3	.057124	2.045	2.197	2.175	640.64	582.76	248.
420.00	2.359	.34247-3	.058635	2.090	2.241	2.228	662.83	603.48	251.
430.00	2.302	.33395-3	.060142	2.134	2.284	2.282	685.46	624.64	254.
440.00	2.248	.32587-3	.061643	2.177	2.327	2.335	708.52	646.23	257.
450.00	2.196	.31819-3	.063141	2.220	2.370	2.387	732.00	668.25	260.
460.00	2.147	.31088-3	.064635	2.262	2.412	2.440	755.91	690.69	262.
470.00	2.100	.30392-3	.066125	2.304	2.453	2.492	780.23	713.56	265.
480.00	2.055	.29727-3	.067612	2.345	2.494	2.544	804.97	736.83	268.
490.00	2.012	.29091-3	.069095	2.385	2.534	2.596	830.10	760.51	271.
500.00	1.970	.28484-3	.070576	2.425	2.573	2.648	855.64	784.59	274.
510.00	1.931	.27902-3	.072055	2.464	2.612	2.699	881.56	809.06	276.
520.00	1.893	.27344-3	.073531	2.503	2.650	2.750	907.88	833.92	279.
530.00	1.857	.26808-3	.075005	2.541	2.688	2.801	934.57	859.16	282.
540.00	1.821	.26294-3	.076477	2.578	2.725	2.852	961.64	884.78	284.
550.00	1.788	.25800-3	.077947	2.615	2.762	2.902	989.07	910.76	287.
560.00	1.755	.25324-3	.079416	2.651	2.798	2.952	1016.87	937.11	290.
570.00	1.724	.24866-3	.080882	2.686	2.833	3.002	1045.02	963.81	292.
580.00	1.694	.24425-3	.082347	2.721	2.868	3.051	1073.52	990.87	295.
590.00	1.665	.23999-3	.083811	2.755	2.902	3.101	1102.37	1018.27	297.
600.00	1.636	.23588-3	.085273	2.789	2.935	3.150	1131.56	1046.01	300.
610.00	1.609	.23192-3	.086734	2.822	2.968	3.199	1161.08	1074.08	302.
620.00	1.583	.22808-3	.088194	2.855	3.001	3.247	1190.92	1102.48	304.
630.00	1.558	.22438-3	.089653	2.887	3.033	3.295	1221.09	1131.21	307.
640.00	1.533	.22079-3	.091110	2.919	3.064	3.343	1251.58	1160.25	309.
650.00	1.509	.21732-3	.092567	2.950	3.095	3.391	1282.37	1189.60	312.
660.00	1.486	.21396-3	.094023	2.980	3.126	3.439	1313.48	1219.26	314.
670.00	1.464	.21070-3	.095478	3.010	3.156	3.486	1344.89	1249.23	316.
680.00	1.442	.20755-3	.096932	3.040	3.185	3.533	1376.59	1279.49	319.
690.00	1.421	.20448-3	.098385	3.069	3.214	3.580	1408.59	1310.05	321.
700.00	1.400	.20151-3	.099837	3.098	3.243	3.626	1440.87	1340.89	323.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

.15 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND M/SEC
				- - KJ/KG /DEG K) - -			- - KJ/KG - -		
250.00	605.957	.74457	.69883	1.634	2.175	-.098	-25.01	-25.26	964.
260.00	595.137	.69812	.63500	1.654	2.218	-.012	-3.05	-3.31	923.
270.00	583.948	.65128	.57158	1.677	2.264	.073	19.35	19.10	879.
271.89	581.782	.64240	.55968	1.681	2.274	.088	23.65	23.39	870.
271.89	4.068	.61508-3	.034803	1.413	1.592	1.397	379.49	342.62	198.
280.00	3.930	.59081-3	.036240	1.449	1.623	1.444	392.52	354.35	202.
290.00	3.775	.56411-3	.037970	1.494	1.664	1.502	408.96	369.22	206.
300.00	3.632	.54029-3	.039662	1.539	1.706	1.559	425.81	384.51	210.
310.00	3.502	.51882-3	.041322	1.585	1.750	1.616	443.09	400.25	214.
320.00	3.381	.49930-3	.042957	1.631	1.794	1.672	460.80	416.44	217.
330.00	3.269	.48143-3	.044571	1.678	1.838	1.728	478.96	433.08	221.
340.00	3.165	.46498-3	.046167	1.724	1.883	1.783	497.57	450.17	225.
350.00	3.067	.44976-3	.047749	1.771	1.929	1.839	516.63	467.73	228.
360.00	2.976	.43562-3	.049317	1.817	1.974	1.894	536.14	485.74	231.
370.00	2.890	.42243-3	.050874	1.864	2.019	1.948	556.11	504.21	235.
380.00	2.810	.41009-3	.052421	1.910	2.064	2.003	576.53	523.14	238.
390.00	2.734	.39851-3	.053959	1.955	2.109	2.057	597.39	542.52	241.
400.00	2.662	.38762-3	.055490	2.001	2.154	2.111	618.71	562.35	244.
410.00	2.594	.37735-3	.057014	2.046	2.198	2.165	640.46	582.64	247.
420.00	2.529	.36765-3	.058531	2.090	2.242	2.218	662.66	603.36	251.
430.00	2.468	.35846-3	.060043	2.134	2.285	2.271	685.30	624.52	254.
440.00	2.410	.34975-3	.061550	2.177	2.328	2.325	708.36	646.12	257.
450.00	2.354	.34147-3	.063053	2.220	2.370	2.377	731.85	668.14	259.
460.00	2.302	.33360-3	.064551	2.262	2.412	2.430	755.77	690.59	262.
470.00	2.251	.32609-3	.066045	2.304	2.453	2.482	780.10	713.46	265.
480.00	2.203	.31893-3	.067536	2.345	2.494	2.534	804.83	736.74	268.
490.00	2.157	.31210-3	.069024	2.385	2.534	2.586	829.98	760.42	271.
500.00	2.112	.30556-3	.070509	2.425	2.574	2.638	855.52	784.50	274.
510.00	2.070	.29929-3	.071991	2.464	2.613	2.689	881.45	808.98	276.
520.00	2.029	.29329-3	.073470	2.503	2.651	2.740	907.76	833.84	279.
530.00	1.990	.28753-3	.074947	2.541	2.688	2.791	934.46	859.08	282.
540.00	1.952	.28201-3	.076422	2.578	2.726	2.842	961.53	884.70	284.
550.00	1.916	.27669-3	.077895	2.615	2.762	2.892	988.97	910.69	287.
560.00	1.881	.27158-3	.079366	2.651	2.798	2.942	1016.77	937.03	289.
570.00	1.848	.26666-3	.080836	2.686	2.833	2.992	1044.93	963.74	292.
580.00	1.815	.26191-3	.082303	2.721	2.868	3.041	1073.43	990.80	295.
590.00	1.784	.25734-3	.083769	2.755	2.902	3.091	1102.28	1018.20	297.
600.00	1.754	.25293-3	.085234	2.789	2.936	3.140	1131.47	1045.94	300.
610.00	1.725	.24867-3	.086697	2.822	2.969	3.189	1160.99	1074.01	302.
620.00	1.696	.24455-3	.088159	2.855	3.001	3.237	1190.84	1102.42	304.
630.00	1.669	.24057-3	.089620	2.887	3.033	3.285	1221.01	1131.14	307.
640.00	1.643	.23672-3	.091079	2.919	3.065	3.333	1251.50	1160.19	309.
650.00	1.617	.23299-3	.092538	2.950	3.095	3.381	1282.30	1189.54	312.
660.00	1.592	.22939-3	.093995	2.980	3.126	3.429	1313.41	1219.21	314.
670.00	1.568	.22589-3	.095452	3.010	3.156	3.476	1344.82	1249.17	316.
680.00	1.545	.22250-3	.096907	3.040	3.185	3.523	1376.52	1279.43	319.
690.00	1.522	.21921-3	.098362	3.069	3.214	3.570	1408.52	1309.99	321.
700.00	1.500	.21602-3	.099816	3.098	3.243	3.616	1440.81	1340.84	323.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

.16 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND M/SEC
				- - KJ/KG /DEG K) - -			- - KJ/KG - -		
250.00	605.971	.74477	.69910	1.634	2.175	-.098	-25.00	-25.27	964.
260.00	595.153	.69831	.63525	1.654	2.218	-.012	-3.04	-3.31	923.
270.00	583.966	.65145	.57182	1.677	2.264	.072	19.36	19.09	879.
273.71	579.704	.63404	.54855	1.686	2.283	.104	27.80	27.53	862.
273.71	4.322	.65555-3	.034832	1.423	1.603	1.397	381.95	344.93	198.
280.00	4.207	.63504-3	.035963	1.450	1.627	1.434	392.11	354.08	201.
290.00	4.039	.60570-3	.037719	1.495	1.667	1.492	408.58	368.96	205.
300.00	3.885	.57964-3	.039432	1.540	1.709	1.549	425.46	384.28	209.
310.00	3.744	.55623-3	.041111	1.586	1.752	1.606	442.77	400.03	213.
320.00	3.614	.53500-3	.042762	1.632	1.796	1.662	460.51	416.24	217.
330.00	3.494	.51562-3	.044390	1.678	1.840	1.718	478.69	432.89	221.
340.00	3.382	.49781-3	.045998	1.725	1.885	1.774	497.31	450.00	224.
350.00	3.277	.48135-3	.047591	1.771	1.930	1.829	516.39	467.56	228.
360.00	3.179	.46608-3	.049169	1.818	1.975	1.884	535.91	485.58	231.
370.00	3.087	.45186-3	.050735	1.864	2.020	1.939	555.89	504.06	234.
380.00	3.001	.43857-3	.052290	1.910	2.065	1.993	576.32	523.00	238.
390.00	2.919	.42610-3	.053836	1.956	2.110	2.047	597.20	542.39	241.
400.00	2.842	.41439-3	.055374	2.001	2.155	2.101	618.52	562.23	244.
410.00	2.769	.40335-3	.056904	2.046	2.199	2.155	640.29	582.51	247.
420.00	2.700	.39292-3	.058428	2.090	2.242	2.209	662.49	603.24	250.
430.00	2.635	.38306-3	.059945	2.134	2.286	2.262	685.13	624.41	253.
440.00	2.572	.37370-3	.061457	2.178	2.329	2.315	708.21	646.01	256.
450.00	2.513	.36482-3	.062965	2.220	2.371	2.368	731.71	668.04	259.
460.00	2.457	.35638-3	.064468	2.263	2.413	2.420	755.62	690.49	262.
470.00	2.403	.34833-3	.065966	2.304	2.454	2.473	779.96	713.36	265.
480.00	2.351	.34066-3	.067461	2.345	2.495	2.525	804.70	736.64	268.
490.00	2.301	.33333-3	.068953	2.386	2.535	2.577	829.85	760.33	271.
500.00	2.254	.32633-3	.070441	2.425	2.574	2.628	855.39	784.41	273.
510.00	2.209	.31962-3	.071927	2.465	2.613	2.680	881.33	808.89	276.
520.00	2.165	.31319-3	.073409	2.503	2.651	2.731	907.65	833.75	279.
530.00	2.123	.30703-3	.074890	2.541	2.689	2.782	934.35	859.00	282.
540.00	2.083	.30111-3	.076368	2.578	2.726	2.832	961.43	884.62	284.
550.00	2.045	.29542-3	.077843	2.615	2.762	2.883	988.87	910.61	287.
560.00	2.007	.28995-3	.079317	2.651	2.798	2.933	1016.67	936.96	289.
570.00	1.971	.28468-3	.080789	2.686	2.833	2.982	1044.83	963.67	292.
580.00	1.937	.27961-3	.082259	2.721	2.868	3.032	1073.34	990.73	294.
590.00	1.903	.27472-3	.083727	2.756	2.902	3.081	1102.19	1018.13	297.
600.00	1.871	.27000-3	.085194	2.789	2.936	3.130	1131.38	1045.87	299.
610.00	1.840	.26544-3	.086660	2.822	2.969	3.179	1160.91	1073.95	302.
620.00	1.810	.26104-3	.088124	2.855	3.001	3.228	1190.76	1102.35	304.
630.00	1.781	.25679-3	.089586	2.887	3.033	3.276	1220.93	1131.08	307.
640.00	1.753	.25267-3	.091048	2.919	3.065	3.324	1251.42	1160.13	309.
650.00	1.725	.24869-3	.092508	2.950	3.096	3.372	1282.23	1189.48	312.
660.00	1.699	.24483-3	.093968	2.980	3.126	3.419	1313.34	1219.15	314.
670.00	1.673	.24109-3	.095426	3.010	3.156	3.467	1344.75	1249.11	316.
680.00	1.648	.23747-3	.096883	3.040	3.186	3.514	1376.46	1279.38	319.
690.00	1.624	.23395-3	.098340	3.069	3.215	3.560	1408.46	1309.94	321.
700.00	1.601	.23054-3	.099795	3.098	3.243	3.607	1440.75	1340.78	323.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

.18 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND M/SEC
				- - KJ/KG /DEG K) - -			- - KJ/KG - -		
250.00	606.000	.74515	.69963	1.634	2.174	-.098	-24.99	-25.28	965.
260.00	595.184	.69867	.63576	1.654	2.218	-.012	-3.03	-3.33	923.
270.00	584.001	.65179	.57232	1.676	2.264	.072	19.38	19.07	879.
277.11	575.795	.61849	.52795	1.695	2.300	.132	35.59	35.28	847.
277.11	4.828	.73688-3	.034864	1.440	1.625	1.398	386.54	349.26	198.
280.00	4.768	.72578-3	.035399	1.453	1.636	1.415	391.26	353.51	200.
290.00	4.573	.69069-3	.037209	1.497	1.675	1.473	407.81	368.45	204.
300.00	4.395	.65981-3	.038968	1.542	1.715	1.531	424.76	383.81	208.
310.00	4.233	.63226-3	.040684	1.587	1.757	1.588	442.12	399.60	212.
320.00	4.084	.60744-3	.042368	1.633	1.800	1.644	459.91	415.83	216.
330.00	3.946	.58487-3	.044025	1.679	1.844	1.700	478.13	432.51	220.
340.00	3.818	.56422-3	.045659	1.726	1.888	1.756	496.79	449.64	224.
350.00	3.699	.54520-3	.047273	1.772	1.933	1.811	515.90	467.23	227.
360.00	3.587	.52759-3	.048872	1.819	1.978	1.866	535.45	485.27	231.
370.00	3.482	.51123-3	.050456	1.865	2.023	1.921	555.45	503.76	234.
380.00	3.384	.49597-3	.052028	1.911	2.067	1.976	575.90	522.71	237.
390.00	3.292	.48169-3	.053589	1.956	2.112	2.030	596.80	542.12	241.
400.00	3.204	.46829-3	.055141	2.001	2.156	2.084	618.14	561.97	244.
410.00	3.122	.45567-3	.056684	2.046	2.200	2.138	639.93	582.27	247.
420.00	3.043	.44377-3	.058220	2.091	2.244	2.191	662.15	603.01	250.
430.00	2.969	.43252-3	.059749	2.135	2.287	2.245	684.81	624.18	253.
440.00	2.898	.42187-3	.061271	2.178	2.330	2.298	707.90	645.79	256.
450.00	2.831	.41176-3	.062788	2.221	2.372	2.350	731.41	667.83	259.
460.00	2.767	.40215-3	.064300	2.263	2.414	2.403	755.34	690.29	262.
470.00	2.706	.39300-3	.065808	2.304	2.455	2.455	779.68	713.17	265.
480.00	2.648	.38429-3	.067311	2.345	2.496	2.508	804.44	736.45	268.
490.00	2.592	.37597-3	.068810	2.386	2.536	2.559	829.59	760.14	270.
500.00	2.538	.36802-3	.070306	2.426	2.575	2.611	855.15	784.24	273.
510.00	2.487	.36041-3	.071798	2.465	2.614	2.662	881.09	808.72	276.
520.00	2.438	.35312-3	.073288	2.503	2.652	2.714	907.42	833.59	279.
530.00	2.391	.34614-3	.074774	2.541	2.690	2.764	934.13	858.84	281.
540.00	2.345	.33943-3	.076258	2.578	2.727	2.815	961.21	884.46	284.
550.00	2.302	.33299-3	.077739	2.615	2.763	2.865	988.66	910.46	287.
560.00	2.260	.32679-3	.079219	2.651	2.799	2.916	1016.47	936.81	289.
570.00	2.219	.32083-3	.080696	2.686	2.834	2.965	1044.64	963.52	292.
580.00	2.180	.31509-3	.082171	2.721	2.869	3.015	1073.15	990.59	294.
590.00	2.142	.30956-3	.083644	2.756	2.903	3.064	1102.01	1017.99	297.
600.00	2.106	.30422-3	.085115	2.789	2.936	3.113	1131.21	1045.74	299.
610.00	2.071	.29907-3	.086585	2.822	2.969	3.162	1160.74	1073.82	302.
620.00	2.037	.29409-3	.088053	2.855	3.002	3.211	1190.60	1102.23	304.
630.00	2.004	.28928-3	.089520	2.887	3.034	3.259	1220.77	1130.96	307.
640.00	1.972	.28463-3	.090985	2.919	3.065	3.307	1251.27	1160.00	309.
650.00	1.941	.28013-3	.092450	2.950	3.096	3.355	1282.08	1189.36	312.
660.00	1.912	.27577-3	.093913	2.980	3.127	3.402	1313.19	1219.03	314.
670.00	1.883	.27155-3	.095374	3.010	3.156	3.450	1344.61	1249.00	316.
680.00	1.855	.26746-3	.096835	3.040	3.186	3.497	1376.32	1279.27	319.
690.00	1.827	.26349-3	.098295	3.069	3.215	3.543	1408.32	1309.83	321.
700.00	1.801	.25964-3	.099753	3.098	3.244	3.590	1440.62	1340.67	323.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

.20 MPA ISOBAR

T	DENSITY	DP/DT	DP/DD	CV	CP	S*	H*	U	VEL SND
DEG K	KG/M3	MPA/K	MPA/(KG/M3)	- - KJ/KG /DEG K) - -			- - KJ/KG	- -	M/SEC
250.00	606.028	.74554	.70016	1.634	2.174	-.098	-24.97	-25.30	965.
260.00	595.216	.69902	.63627	1.654	2.217	-.012	-3.01	-3.35	924.
270.00	584.036	.65214	.57281	1.676	2.264	.072	19.39	19.05	880.
280.00	572.423	.60528	.51059	1.703	2.316	.156	42.29	41.94	833.
280.22	572.163	.60426	.50924	1.703	2.317	.157	42.79	42.44	832.
280.22	5.332	.81877-3	.034864	1.457	1.646	1.399	390.75	353.25	198.
290.00	5.114	.77823-3	.036690	1.499	1.682	1.456	407.03	367.92	203.
300.00	4.912	.74203-3	.038496	1.544	1.721	1.514	424.04	383.33	207.
310.00	4.727	.70999-3	.040253	1.589	1.762	1.571	441.46	399.16	211.
320.00	4.558	.68128-3	.041971	1.634	1.805	1.628	459.30	415.42	215.
330.00	4.402	.65532-3	.043657	1.680	1.848	1.684	477.56	432.13	219.
340.00	4.258	.63165-3	.045317	1.727	1.892	1.740	496.26	449.28	223.
350.00	4.123	.60993-3	.046954	1.773	1.936	1.795	515.40	466.89	226.
360.00	3.997	.58988-3	.048573	1.819	1.981	1.850	534.98	484.95	230.
370.00	3.880	.57129-3	.050176	1.865	2.025	1.905	555.01	503.46	233.
380.00	3.769	.55399-3	.051765	1.911	2.070	1.960	575.49	522.43	237.
390.00	3.666	.53782-3	.053342	1.957	2.114	2.014	596.41	541.85	240.
400.00	3.568	.52267-3	.054907	2.002	2.158	2.068	617.77	561.71	243.
410.00	3.475	.50843-3	.056464	2.047	2.202	2.122	639.57	582.02	246.
420.00	3.387	.49501-3	.058011	2.091	2.246	2.176	661.81	602.77	250.
430.00	3.304	.48234-3	.059552	2.135	2.289	2.229	684.48	623.95	253.
440.00	3.225	.47036-3	.061085	2.178	2.331	2.282	707.58	645.57	256.
450.00	3.150	.45899-3	.062612	2.221	2.373	2.335	731.11	667.62	259.
460.00	3.079	.44820-3	.064133	2.263	2.415	2.388	755.05	690.09	262.
470.00	3.010	.43793-3	.065649	2.305	2.456	2.440	779.41	712.97	265.
480.00	2.945	.42815-3	.067160	2.346	2.497	2.492	804.17	736.26	267.
490.00	2.883	.41882-3	.068667	2.386	2.537	2.544	829.34	759.96	270.
500.00	2.823	.40991-3	.070170	2.426	2.576	2.596	854.90	784.06	273.
510.00	2.766	.40139-3	.071670	2.465	2.615	2.647	880.86	808.55	276.
520.00	2.711	.39323-3	.073166	2.503	2.653	2.698	907.20	833.42	278.
530.00	2.658	.38541-3	.074659	2.541	2.690	2.749	933.91	858.68	281.
540.00	2.608	.37790-3	.076148	2.578	2.727	2.800	961.00	884.31	284.
550.00	2.559	.37070-3	.077636	2.615	2.764	2.850	988.46	910.30	286.
560.00	2.512	.36377-3	.079120	2.651	2.800	2.900	1016.28	936.66	289.
570.00	2.467	.35711-3	.080602	2.687	2.835	2.950	1044.45	963.38	292.
580.00	2.424	.35069-3	.082082	2.721	2.869	3.000	1072.97	990.44	294.
590.00	2.382	.34451-3	.083560	2.756	2.903	3.049	1101.83	1017.86	297.
600.00	2.341	.33855-3	.085036	2.789	2.937	3.098	1131.04	1045.60	299.
610.00	2.302	.33279-3	.086510	2.823	2.970	3.147	1160.57	1073.69	302.
620.00	2.264	.32724-3	.087983	2.855	3.002	3.195	1190.43	1102.10	304.
630.00	2.228	.32187-3	.089454	2.887	3.034	3.244	1220.62	1130.83	307.
640.00	2.192	.31667-3	.090923	2.919	3.066	3.292	1251.12	1159.88	309.
650.00	2.158	.31165-3	.092391	2.950	3.097	3.340	1281.93	1189.24	311.
660.00	2.125	.30679-3	.093857	2.980	3.127	3.387	1313.05	1218.91	314.
670.00	2.092	.30208-3	.095323	3.010	3.157	3.434	1344.47	1248.88	316.
680.00	2.061	.29751-3	.096787	3.040	3.186	3.481	1376.18	1279.15	319.
690.00	2.031	.29309-3	.098250	3.069	3.215	3.528	1408.19	1309.72	321.
700.00	2.002	.28879-3	.099711	3.098	3.244	3.575	1440.49	1340.57	323.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

.25 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV - - KJ/KG	CP /DEG K) - -	S* - -	H* - - KJ/KG	U - -	VEL SND M/SEC
250.00	606.100	.74650	.70149	1.634	2.174	-.098	-24.92	-25.33	966.
260.00	595.294	.69992	.63755	1.653	2.217	-.012	-2.97	-3.39	925.
270.00	584.123	.65299	.57405	1.676	2.264	.072	19.43	19.01	881.
280.00	572.520	.60611	.51179	1.702	2.315	.155	42.32	41.89	834.
287.08	564.006	.57311	.46879	1.723	2.356	.214	58.85	58.41	800.
287.08	6.587	.10262-2	.034764	1.494	1.694	1.402	400.02	362.07	199.
290.00	6.502	.10094-2	.035347	1.506	1.704	1.419	404.99	366.54	200.
300.00	6.231	.95737-3	.037284	1.549	1.739	1.478	422.20	382.08	205.
310.00	5.987	.91223-3	.039149	1.593	1.777	1.535	439.77	398.01	209.
320.00	5.764	.87245-3	.040959	1.638	1.817	1.592	457.74	414.37	213.
330.00	5.560	.83694-3	.042723	1.684	1.859	1.649	476.12	431.15	217.
340.00	5.372	.80492-3	.044451	1.729	1.901	1.705	494.92	448.37	221.
350.00	5.197	.77579-3	.046149	1.775	1.944	1.761	514.14	466.04	225.
360.00	5.035	.74910-3	.047821	1.821	1.988	1.816	533.80	484.15	228.
370.00	4.883	.72451-3	.049471	1.867	2.032	1.871	553.90	502.70	232.
380.00	4.742	.70175-3	.051104	1.913	2.076	1.926	574.43	521.71	235.
390.00	4.608	.68057-3	.052720	1.958	2.119	1.980	595.41	541.16	239.
400.00	4.483	.66080-3	.054321	2.003	2.163	2.035	616.82	561.06	242.
410.00	4.365	.64228-3	.055911	2.048	2.207	2.089	638.67	581.39	245.
420.00	4.253	.62489-3	.057489	2.092	2.250	2.142	660.95	602.17	249.
430.00	4.147	.60851-3	.059058	2.136	2.292	2.196	683.66	623.38	252.
440.00	4.047	.59304-3	.060618	2.179	2.335	2.249	706.80	645.02	255.
450.00	3.952	.57841-3	.062170	2.222	2.377	2.302	730.36	667.09	258.
460.00	3.861	.56455-3	.063714	2.264	2.418	2.355	754.33	689.58	261.
470.00	3.774	.55138-3	.065252	2.305	2.459	2.407	778.72	712.48	264.
480.00	3.692	.53885-3	.066784	2.346	2.499	2.459	803.51	735.79	267.
490.00	3.613	.52692-3	.068310	2.387	2.539	2.511	828.70	759.50	270.
500.00	3.537	.51553-3	.069832	2.426	2.578	2.563	854.29	783.61	272.
510.00	3.465	.50466-3	.071349	2.465	2.617	2.614	880.27	808.12	275.
520.00	3.396	.49426-3	.072861	2.504	2.655	2.665	906.63	833.01	278.
530.00	3.329	.48430-3	.074370	2.542	2.692	2.716	933.36	858.27	281.
540.00	3.266	.47476-3	.075874	2.579	2.729	2.767	960.47	883.91	283.
550.00	3.204	.46560-3	.077376	2.615	2.766	2.817	987.95	909.92	286.
560.00	3.145	.45680-3	.078874	2.651	2.801	2.868	1015.78	936.29	289.
570.00	3.088	.44835-3	.080369	2.687	2.836	2.918	1043.97	963.02	291.
580.00	3.034	.44021-3	.081862	2.722	2.871	2.967	1072.50	990.09	294.
590.00	2.981	.43237-3	.083352	2.756	2.905	3.017	1101.38	1017.51	296.
600.00	2.930	.42482-3	.084839	2.790	2.938	3.066	1130.60	1045.27	299.
610.00	2.881	.41754-3	.086324	2.823	2.971	3.114	1160.15	1073.36	301.
620.00	2.833	.41051-3	.087807	2.855	3.004	3.163	1190.02	1101.78	304.
630.00	2.787	.40372-3	.089288	2.887	3.035	3.211	1220.22	1130.52	306.
640.00	2.743	.39715-3	.090767	2.919	3.067	3.259	1250.73	1159.57	309.
650.00	2.699	.39081-3	.092244	2.950	3.098	3.307	1281.55	1188.94	311.
660.00	2.658	.38466-3	.093720	2.981	3.128	3.355	1312.68	1218.62	314.
670.00	2.617	.37872-3	.095194	3.011	3.158	3.402	1344.11	1248.60	316.
680.00	2.578	.37296-3	.096666	3.040	3.187	3.449	1375.84	1278.87	318.
690.00	2.540	.36737-3	.098137	3.069	3.216	3.496	1407.86	1309.44	321.
700.00	2.503	.36196-3	.099607	3.098	3.245	3.542	1440.17	1340.30	323.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

.30 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV - - KJ/KG /DEG K) - -	CP	S*	H* - - KJ/KG	U - -	VEL SND M/SEC
250.00	606.171	.74746	.70282	1.633	2.174	-.099	-24.87	-25.37	967.
260.00	595.373	.70082	.63882	1.653	2.217	-.012	-2.92	-3.43	926.
270.00	584.210	.65384	.57528	1.675	2.263	.072	19.47	18.96	882.
280.00	572.618	.60693	.51300	1.702	2.315	.155	42.36	41.84	835.
290.00	560.519	.56036	.45251	1.732	2.373	.237	65.79	65.26	787.
292.96	556.825	.54666	.43500	1.742	2.391	.262	72.85	72.31	773.
292.96	7.837	.12380-2	.034564	1.526	1.737	1.406	407.95	369.67	198.
300.00	7.596	.11884-2	.036022	1.555	1.759	1.447	420.25	380.75	202.
310.00	7.283	.11270-2	.038009	1.598	1.793	1.505	438.01	396.82	207.
320.00	7.001	.10738-2	.039919	1.642	1.831	1.563	456.13	413.28	211.
330.00	6.743	.10270-2	.041769	1.687	1.870	1.620	474.63	430.15	215.
340.00	6.508	.98530-3	.043570	1.732	1.911	1.676	493.54	447.44	219.
350.00	6.290	.94772-3	.045331	1.778	1.953	1.732	512.86	465.16	223.
360.00	6.089	.91357-3	.047059	1.823	1.995	1.788	532.60	483.33	227.
370.00	5.901	.88231-3	.048760	1.869	2.038	1.843	552.77	501.93	231.
380.00	5.726	.85353-3	.050436	1.914	2.082	1.898	573.37	520.98	234.
390.00	5.563	.82688-3	.052093	1.959	2.125	1.953	594.40	540.47	238.
400.00	5.409	.80211-3	.053732	2.004	2.168	2.007	615.86	560.40	241.
410.00	5.264	.77899-3	.055355	2.049	2.211	2.061	637.76	580.77	244.
420.00	5.127	.75734-3	.056965	2.093	2.254	2.115	660.08	601.57	248.
430.00	4.998	.73700-3	.058563	2.137	2.296	2.168	682.84	622.81	251.
440.00	4.875	.71785-3	.060149	2.180	2.338	2.222	706.01	644.47	254.
450.00	4.759	.69977-3	.061726	2.222	2.380	2.275	729.60	666.56	257.
460.00	4.648	.68266-3	.063294	2.264	2.421	2.327	753.61	689.07	260.
470.00	4.543	.66645-3	.064854	2.306	2.462	2.380	778.02	711.99	263.
480.00	4.443	.65105-3	.066407	2.347	2.502	2.432	802.84	735.31	266.
490.00	4.347	.63640-3	.067953	2.387	2.542	2.484	828.06	759.04	269.
500.00	4.255	.62244-3	.069493	2.427	2.581	2.536	853.67	783.17	272.
510.00	4.167	.60912-3	.071027	2.466	2.619	2.587	879.67	807.69	275.
520.00	4.083	.59640-3	.072557	2.504	2.657	2.639	906.05	832.59	277.
530.00	4.003	.58423-3	.074081	2.542	2.694	2.690	932.81	857.87	280.
540.00	3.926	.57258-3	.075601	2.579	2.731	2.740	959.94	883.52	283.
550.00	3.851	.56140-3	.077116	2.616	2.767	2.791	987.43	909.54	286.
560.00	3.780	.55068-3	.078628	2.652	2.803	2.841	1015.28	935.92	288.
570.00	3.711	.54038-3	.080136	2.687	2.838	2.891	1043.49	962.65	291.
580.00	3.645	.53047-3	.081641	2.722	2.872	2.940	1072.04	989.74	294.
590.00	3.581	.52094-3	.083143	2.756	2.906	2.990	1100.93	1017.17	296.
600.00	3.520	.51175-3	.084642	2.790	2.940	3.039	1130.17	1044.93	299.
610.00	3.460	.50290-3	.086138	2.823	2.973	3.088	1159.73	1073.03	301.
620.00	3.403	.49436-3	.087632	2.856	3.005	3.136	1189.62	1101.46	304.
630.00	3.348	.48612-3	.089123	2.888	3.037	3.185	1219.82	1130.20	306.
640.00	3.294	.47816-3	.090611	2.919	3.068	3.233	1250.35	1159.27	309.
650.00	3.242	.47046-3	.092098	2.950	3.099	3.281	1281.18	1188.64	311.
660.00	3.192	.46301-3	.093582	2.981	3.129	3.328	1312.32	1218.33	313.
670.00	3.143	.45581-3	.095065	3.011	3.159	3.375	1343.76	1248.31	316.
680.00	3.096	.44883-3	.096546	3.040	3.188	3.422	1375.50	1278.59	318.
690.00	3.050	.44206-3	.098025	3.069	3.217	3.469	1407.53	1309.17	321.
700.00	3.006	.43551-3	.099502	3.098	3.246	3.516	1439.84	1340.03	323.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

.35 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND
				- - KJ/KG /DEG K) - -			- - KJ/KG	- -	M/SEC
250.00	606.242	.74841	.70415	1.633	2.174	-.099	-24.83	-25.41	968.
260.00	595.451	.70171	.64009	1.652	2.217	-.013	-2.88	-3.47	927.
270.00	584.297	.65469	.57651	1.675	2.263	.072	19.51	18.92	883.
280.00	572.715	.60775	.51420	1.701	2.314	.155	42.40	41.78	836.
290.00	560.629	.56117	.45370	1.732	2.372	.237	65.82	65.20	788.
298.14	550.346	.52361	.40599	1.760	2.425	.304	85.36	84.72	748.
298.14	9.087	.14545-2	.034296	1.555	1.778	1.409	414.90	376.38	198.
300.00	9.009	.14376-2	.034704	1.563	1.783	1.420	418.20	379.35	199.
310.00	8.619	.13559-2	.036829	1.604	1.812	1.479	436.17	395.56	204.
320.00	8.270	.12865-2	.038850	1.647	1.846	1.537	454.46	412.14	209.
330.00	7.955	.12263-2	.040792	1.691	1.883	1.594	473.10	429.10	213.
340.00	7.667	.11734-2	.042672	1.735	1.922	1.651	492.13	446.48	217.
350.00	7.403	.11261-2	.044500	1.780	1.962	1.707	511.55	464.27	221.
360.00	7.160	.10836-2	.046288	1.825	2.004	1.763	531.37	482.49	225.
370.00	6.934	.10449-2	.048040	1.871	2.046	1.819	551.62	501.15	229.
380.00	6.724	.10095-2	.049764	1.916	2.088	1.874	572.29	520.24	233.
390.00	6.528	.97689-3	.051462	1.961	2.131	1.929	593.38	539.77	236.
400.00	6.344	.94670-3	.053139	2.006	2.173	1.983	614.90	559.73	240.
410.00	6.172	.91863-3	.054797	2.050	2.216	2.037	636.84	580.13	243.
420.00	6.009	.89242-3	.056439	2.094	2.258	2.091	659.21	600.96	247.
430.00	5.855	.86788-3	.058066	2.138	2.300	2.145	682.00	622.23	250.
440.00	5.710	.84482-3	.059680	2.181	2.342	2.198	705.22	643.92	253.
450.00	5.572	.82309-3	.061282	2.223	2.383	2.251	728.84	666.03	256.
460.00	5.441	.80258-3	.062874	2.265	2.424	2.304	752.88	688.55	259.
470.00	5.316	.78317-3	.064456	2.306	2.465	2.357	777.33	711.49	262.
480.00	5.198	.76476-3	.066030	2.347	2.505	2.409	802.17	734.84	265.
490.00	5.084	.74728-3	.067596	2.388	2.544	2.461	827.42	758.58	268.
500.00	4.976	.73064-3	.069154	2.427	2.583	2.513	853.06	782.72	271.
510.00	4.873	.71479-3	.070706	2.466	2.621	2.564	879.08	807.25	274.
520.00	4.774	.69966-3	.072252	2.505	2.659	2.616	905.48	832.17	277.
530.00	4.679	.68520-3	.073792	2.542	2.696	2.667	932.26	857.46	280.
540.00	4.588	.67137-3	.075327	2.580	2.733	2.717	959.41	883.12	283.
550.00	4.501	.65811-3	.076857	2.616	2.769	2.768	986.92	909.16	285.
560.00	4.417	.64540-3	.078382	2.652	2.805	2.818	1014.79	935.55	288.
570.00	4.336	.63320-3	.079904	2.687	2.840	2.868	1043.01	962.29	291.
580.00	4.258	.62148-3	.081421	2.722	2.874	2.918	1071.58	989.38	293.
590.00	4.183	.61021-3	.082935	2.756	2.908	2.967	1100.48	1016.82	296.
600.00	4.111	.59935-3	.084445	2.790	2.941	3.016	1129.73	1044.60	298.
610.00	4.041	.58890-3	.085952	2.823	2.974	3.065	1159.31	1072.70	301.
620.00	3.974	.57881-3	.087456	2.856	3.006	3.114	1189.21	1101.14	303.
630.00	3.909	.56908-3	.088957	2.888	3.038	3.162	1219.43	1129.89	306.
640.00	3.846	.55969-3	.090456	2.919	3.069	3.210	1249.96	1158.96	308.
650.00	3.785	.55061-3	.091952	2.950	3.100	3.258	1280.81	1188.34	311.
660.00	3.726	.54184-3	.093445	2.981	3.130	3.306	1311.96	1218.03	313.
670.00	3.669	.53335-3	.094937	3.011	3.160	3.353	1343.41	1248.02	316.
680.00	3.614	.52513-3	.096426	3.040	3.189	3.400	1375.16	1278.31	318.
690.00	3.560	.51716-3	.097913	3.070	3.218	3.447	1407.20	1308.89	320.
700.00	3.508	.50945-3	.099398	3.098	3.247	3.493	1439.52	1339.76	323.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(N.B.T,LIQUID)

.40 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV - - KJ/KG	CP /DEG K) - -	S*	H* - - KJ/KG	U - -	VEL SND M/SEC
250.00	606.313	.74937	.70547	1.632	2.173	-.099	-24.78	-25.44	969.
260.00	595.529	.70261	.64136	1.652	2.216	-.013	-2.83	-3.51	928.
270.00	584.383	.65554	.57774	1.674	2.263	.072	19.56	18.87	884.
280.00	572.813	.60858	.51540	1.701	2.314	.155	42.43	41.73	837.
290.00	560.739	.56198	.45488	1.731	2.372	.237	65.86	65.14	789.
300.00	548.067	.51591	.39651	1.766	2.437	.319	89.89	89.16	740.
302.80	544.394	.50309	.38055	1.777	2.456	.341	96.75	96.01	725.
302.80	10.339	.16758-2	.033979	1.582	1.816	1.413	421.11	382.42	198.
310.00	10.000	.16008-2	.035605	1.610	1.834	1.455	434.25	394.25	201.
320.00	9.576	.15117-2	.037750	1.652	1.863	1.514	452.73	410.95	206.
330.00	9.196	.14357-2	.039793	1.695	1.897	1.572	471.53	428.03	211.
340.00	8.852	.13697-2	.041756	1.739	1.934	1.629	490.68	445.49	215.
350.00	8.538	.13115-2	.043657	1.783	1.972	1.686	510.20	463.35	220.
360.00	8.250	.12595-2	.045506	1.828	2.012	1.742	530.13	481.64	224.
370.00	7.983	.12126-2	.047313	1.873	2.053	1.798	550.45	500.35	228.
380.00	7.736	.11699-2	.049085	1.918	2.095	1.853	571.19	519.48	232.
390.00	7.506	.11307-2	.050827	1.962	2.137	1.908	592.35	539.05	235.
400.00	7.291	.10947-2	.052543	2.007	2.179	1.962	613.92	559.06	239.
410.00	7.089	.10613-2	.054236	2.051	2.221	2.017	635.92	579.49	242.
420.00	6.899	.10302-2	.055910	2.095	2.263	2.071	658.33	600.35	246.
430.00	6.720	.10012-2	.057567	2.138	2.304	2.124	681.17	621.64	249.
440.00	6.551	.97398-3	.059209	2.181	2.346	2.178	704.42	643.36	252.
450.00	6.391	.94842-3	.060837	2.224	2.387	2.231	728.08	665.49	256.
460.00	6.239	.92433-3	.062453	2.266	2.427	2.284	752.15	688.04	259.
470.00	6.094	.90157-3	.064058	2.307	2.468	2.337	776.63	710.99	262.
480.00	5.957	.88002-3	.065652	2.348	2.507	2.389	801.50	734.36	265.
490.00	5.826	.85958-3	.067238	2.388	2.547	2.441	826.77	758.12	268.
500.00	5.701	.84016-3	.068815	2.428	2.585	2.493	852.44	782.27	271.
510.00	5.582	.82167-3	.070385	2.467	2.624	2.544	878.48	806.82	274.
520.00	5.468	.80404-3	.071947	2.505	2.661	2.596	904.91	831.75	276.
530.00	5.358	.78722-3	.073503	2.543	2.698	2.647	931.71	857.05	279.
540.00	5.253	.77113-3	.075053	2.580	2.735	2.698	958.87	882.73	282.
550.00	5.153	.75574-3	.076598	2.616	2.771	2.748	986.40	908.77	285.
560.00	5.056	.74098-3	.078137	2.652	2.806	2.798	1014.29	935.17	288.
570.00	4.963	.72683-3	.079671	2.688	2.841	2.848	1042.53	961.93	290.
580.00	4.873	.71324-3	.081201	2.722	2.875	2.898	1071.11	989.03	293.
590.00	4.787	.70018-3	.082727	2.757	2.909	2.948	1100.03	1016.48	295.
600.00	4.704	.68762-3	.084248	2.790	2.943	2.997	1129.29	1044.26	298.
610.00	4.624	.67551-3	.085766	2.823	2.975	3.046	1158.88	1072.37	301.
620.00	4.546	.66385-3	.087281	2.856	3.007	3.094	1188.80	1100.82	303.
630.00	4.472	.65261-3	.088792	2.888	3.039	3.143	1219.03	1129.58	306.
640.00	4.399	.64175-3	.090301	2.920	3.070	3.191	1249.58	1158.66	308.
650.00	4.329	.63127-3	.091806	2.951	3.101	3.239	1280.44	1188.04	311.
660.00	4.262	.62114-3	.093308	2.981	3.131	3.286	1311.60	1217.74	313.
670.00	4.196	.61134-3	.094808	3.011	3.161	3.333	1343.06	1247.74	315.
680.00	4.133	.60185-3	.096306	3.041	3.190	3.381	1374.82	1278.03	318.
690.00	4.071	.59267-3	.097801	3.070	3.219	3.427	1406.86	1308.61	320.
700.00	4.012	.58377-3	.099294	3.098	3.248	3.474	1439.20	1339.49	323.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV - - KJ/KG /DEG K) - -	CP	S*	H* - - KJ/KG - -	U	VEL SND M/SEC
250.00	606.384	.75032	.70680	1.632	2.173	-.099	-24.74	-25.48	970.
260.00	595.607	.70350	.64263	1.652	2.216	-.013	-2.79	-3.55	929.
270.00	584.470	.65639	.57897	1.674	2.262	.072	19.60	18.83	885.
280.00	572.909	.60939	.51660	1.700	2.314	.155	42.47	41.68	838.
290.00	560.849	.56278	.45606	1.731	2.371	.237	65.89	65.09	790.
300.00	548.193	.51671	.39768	1.766	2.436	.318	89.92	89.10	741.
307.03	538.871	.48469	.35803	1.792	2.486	.375	107.22	106.38	705.
307.03	11.594	.19022-2	.033625	1.606	1.852	1.416	426.73	387.91	197.
310.00	11.429	.18641-2	.034334	1.618	1.858	1.434	432.23	392.86	199.
320.00	10.920	.17510-2	.036616	1.658	1.882	1.493	450.93	409.72	204.
330.00	10.468	.16563-2	.038769	1.699	1.912	1.552	469.90	426.91	209.
340.00	10.063	.15751-2	.040823	1.742	1.946	1.609	489.19	444.47	214.
350.00	9.694	.15043-2	.042800	1.786	1.983	1.666	508.83	462.41	218.
360.00	9.358	.14416-2	.044714	1.830	2.021	1.722	528.85	480.77	222.
370.00	9.048	.13855-2	.046578	1.875	2.061	1.778	549.27	499.53	226.
380.00	8.762	.13348-2	.048400	1.919	2.102	1.834	570.08	518.72	230.
390.00	8.496	.12886-2	.050186	1.964	2.143	1.889	591.30	538.33	234.
400.00	8.248	.12462-2	.051942	2.008	2.184	1.944	612.94	558.37	238.
410.00	8.015	.12071-2	.053672	2.052	2.226	1.998	634.98	578.84	241.
420.00	7.797	.11708-2	.055380	2.096	2.267	2.052	657.45	599.74	245.
430.00	7.592	.11370-2	.057067	2.139	2.308	2.106	680.32	621.05	248.
440.00	7.399	.11054-2	.058737	2.182	2.349	2.160	703.61	642.79	251.
450.00	7.215	.10758-2	.060391	2.225	2.390	2.213	727.31	664.95	255.
460.00	7.042	.10479-2	.062031	2.266	2.431	2.266	751.42	687.52	258.
470.00	6.877	.10217-2	.063659	2.308	2.471	2.319	775.93	710.49	261.
480.00	6.721	.99683-3	.065274	2.348	2.510	2.371	800.83	733.87	264.
490.00	6.572	.97331-3	.066880	2.389	2.549	2.423	826.13	757.65	267.
500.00	6.430	.95099-3	.068476	2.428	2.588	2.475	851.81	781.83	270.
510.00	6.294	.92977-3	.070063	2.467	2.626	2.527	877.88	806.38	273.
520.00	6.164	.90956-3	.071643	2.505	2.663	2.578	904.33	831.33	276.
530.00	6.040	.89029-3	.073215	2.543	2.700	2.629	931.15	856.64	279.
540.00	5.921	.87188-3	.074780	2.580	2.737	2.680	958.34	882.33	282.
550.00	5.806	.85428-3	.076338	2.617	2.773	2.731	985.89	908.39	284.
560.00	5.697	.83742-3	.077891	2.653	2.808	2.781	1013.79	934.80	287.
570.00	5.591	.82126-3	.079439	2.688	2.843	2.831	1042.04	961.56	290.
580.00	5.490	.80576-3	.080981	2.723	2.877	2.881	1070.64	988.68	293.
590.00	5.392	.79087-3	.082519	2.757	2.911	2.930	1099.58	1016.13	295.
600.00	5.298	.77655-3	.084052	2.791	2.944	2.979	1128.86	1043.92	298.
610.00	5.207	.76276-3	.085581	2.824	2.977	3.028	1158.46	1072.04	300.
620.00	5.120	.74949-3	.087106	2.856	3.009	3.077	1188.39	1100.49	303.
630.00	5.035	.73669-3	.088628	2.888	3.040	3.125	1218.63	1129.26	305.
640.00	4.954	.72435-3	.090146	2.920	3.072	3.173	1249.19	1158.35	308.
650.00	4.875	.71243-3	.091660	2.951	3.102	3.221	1280.06	1187.74	310.
660.00	4.798	.70091-3	.093172	2.981	3.132	3.269	1311.23	1217.45	313.
670.00	4.724	.68978-3	.094681	3.011	3.162	3.316	1342.71	1247.45	315.
680.00	4.652	.67901-3	.096187	3.041	3.191	3.363	1374.47	1277.75	318.
690.00	4.583	.66858-3	.097690	3.070	3.220	3.410	1406.53	1308.34	320.
700.00	4.515	.65848-3	.099191	3.098	3.248	3.457	1438.87	1339.22	322.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

.50 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND M/SEC
				- - KJ/KG /DEG K) - -			- - KJ/KG	- -	
250.00	606.454	.75127	.70812	1.631	2.173	-.099	-24.69	-25.51	971.
260.00	595.685	.70439	.64390	1.651	2.216	-.013	-2.75	-3.59	930.
270.00	584.556	.65723	.58019	1.674	2.262	.071	19.64	18.78	886.
280.00	573.006	.61021	.51780	1.700	2.313	.155	42.51	41.63	839.
290.00	560.959	.56358	.45724	1.731	2.371	.237	65.92	65.03	791.
300.00	548.319	.51751	.39885	1.765	2.435	.318	89.94	89.03	742.
310.00	534.960	.47205	.34280	1.804	2.508	.399	114.65	113.72	690.
310.93	533.676	.46785	.33771	1.808	2.515	.407	116.99	116.05	686.
310.93	12.854	.21338-2	.033245	1.629	1.887	1.419	431.86	392.97	196.
320.00	12.308	.20061-2	.035445	1.664	1.904	1.474	449.05	408.43	201.
330.00	11.776	.18891-2	.037718	1.704	1.930	1.533	468.21	425.75	207.
340.00	11.302	.17902-2	.039870	1.746	1.960	1.591	487.66	443.42	212.
350.00	10.875	.17050-2	.041928	1.789	1.995	1.648	507.43	461.45	216.
360.00	10.486	.16304-2	.043912	1.833	2.031	1.705	527.56	479.88	221.
370.00	10.130	.15641-2	.045835	1.877	2.070	1.761	548.06	498.70	225.
380.00	9.802	.15045-2	.047709	1.921	2.109	1.817	568.95	517.94	229.
390.00	9.499	.14506-2	.049541	1.966	2.149	1.872	590.24	537.60	233.
400.00	9.216	.14013-2	.051339	2.010	2.190	1.927	611.94	557.68	237.
410.00	8.952	.13560-2	.053106	2.054	2.231	1.982	634.04	578.19	240.
420.00	8.705	.13142-2	.054847	2.097	2.272	2.036	656.55	599.11	244.
430.00	8.472	.12753-2	.056565	2.140	2.313	2.090	679.48	620.46	247.
440.00	8.253	.12391-2	.058264	2.183	2.353	2.143	702.81	642.22	251.
450.00	8.046	.12052-2	.059944	2.225	2.394	2.197	726.54	664.40	254.
460.00	7.851	.11734-2	.061609	2.267	2.434	2.250	750.68	686.99	257.
470.00	7.665	.11435-2	.063259	2.308	2.474	2.303	775.22	709.99	260.
480.00	7.489	.11152-2	.064896	2.349	2.513	2.355	800.15	733.39	263.
490.00	7.321	.10885-2	.066522	2.389	2.552	2.407	825.48	757.19	267.
500.00	7.162	.10632-2	.068137	2.429	2.590	2.459	851.19	781.37	270.
510.00	7.009	.10391-2	.069742	2.468	2.628	2.511	877.28	805.95	273.
520.00	6.863	.10162-2	.071338	2.506	2.666	2.562	903.75	830.90	275.
530.00	6.724	.99442-3	.072926	2.543	2.702	2.613	930.59	856.23	278.
540.00	6.591	.97362-3	.074506	2.581	2.739	2.664	957.80	881.93	281.
550.00	6.463	.95374-3	.076079	2.617	2.775	2.715	985.37	908.00	284.
560.00	6.340	.93472-3	.077646	2.653	2.810	2.765	1013.29	934.42	287.
570.00	6.222	.91651-3	.079207	2.688	2.844	2.815	1041.56	961.20	289.
580.00	6.108	.89903-3	.080762	2.723	2.879	2.865	1070.18	988.32	292.
590.00	5.999	.88226-3	.082311	2.757	2.912	2.914	1099.13	1015.78	295.
600.00	5.894	.86615-3	.083856	2.791	2.945	2.964	1128.42	1043.58	297.
610.00	5.792	.85064-3	.085396	2.824	2.978	3.013	1158.04	1071.72	300.
620.00	5.694	.83572-3	.086932	2.856	3.010	3.061	1187.98	1100.17	303.
630.00	5.600	.82134-3	.088463	2.888	3.042	3.110	1218.24	1128.95	305.
640.00	5.509	.80747-3	.089991	2.920	3.073	3.158	1248.81	1158.04	308.
650.00	5.420	.79409-3	.091515	2.951	3.103	3.206	1279.69	1187.44	310.
660.00	5.335	.78116-3	.093036	2.981	3.133	3.253	1310.87	1217.15	313.
670.00	5.252	.76867-3	.094553	3.011	3.163	3.301	1342.35	1247.16	315.
680.00	5.172	.75659-3	.096067	3.041	3.192	3.348	1374.13	1277.47	318.
690.00	5.095	.74490-3	.097579	3.070	3.221	3.395	1406.20	1308.06	320.
700.00	5.020	.73359-3	.099087	3.099	3.249	3.441	1438.55	1338.95	322.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

.55 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND M/SEC
				- - KJ/KG /DEG K) - -			- - KJ/KG	- -	
250.00	606.525	.75222	.70944	1.631	2.173	-.099	-24.64	-25.55	972.
260.00	595.762	.70527	.64516	1.651	2.215	-.013	-2.70	-3.63	931.
270.00	584.642	.65808	.58142	1.673	2.261	.071	19.68	18.74	886.
280.00	573.103	.61103	.51899	1.699	2.313	.154	42.54	41.58	840.
290.00	561.068	.56438	.45842	1.730	2.370	.236	65.95	64.97	792.
300.00	548.444	.51831	.40002	1.765	2.435	.318	89.97	88.97	743.
310.00	535.106	.47286	.34397	1.803	2.507	.399	114.67	113.64	692.
314.55	528.761	.45240	.31928	1.822	2.543	.436	126.15	125.11	668.
314.55	14.121	.23708-2	.032842	1.651	1.921	1.423	436.60	397.65	195.
320.00	13.743	.22789-2	.034234	1.671	1.928	1.456	447.09	407.07	199.
330.00	13.121	.21353-2	.036639	1.710	1.948	1.515	466.47	424.55	204.
340.00	12.571	.20159-2	.038897	1.751	1.975	1.574	486.08	442.33	210.
350.00	12.080	.19143-2	.041041	1.793	2.007	1.632	505.99	460.46	214.
360.00	11.636	.18262-2	.043098	1.836	2.042	1.689	526.23	478.97	219.
370.00	11.230	.17485-2	.045083	1.880	2.078	1.745	546.83	497.86	223.
380.00	10.858	.16793-2	.047011	1.923	2.117	1.801	567.81	517.16	227.
390.00	10.515	.16169-2	.048891	1.967	2.156	1.856	589.17	536.86	231.
400.00	10.196	.15602-2	.050731	2.011	2.196	1.912	610.93	556.99	235.
410.00	9.899	.15083-2	.052536	2.055	2.236	1.966	633.09	577.53	239.
420.00	9.621	.14605-2	.054312	2.098	2.277	2.021	655.65	598.49	243.
430.00	9.360	.14163-2	.056062	2.141	2.317	2.075	678.62	619.86	246.
440.00	9.115	.13751-2	.057789	2.184	2.357	2.128	701.99	641.65	250.
450.00	8.884	.13368-2	.059496	2.226	2.397	2.182	725.77	663.86	253.
460.00	8.665	.13008-2	.061185	2.268	2.437	2.235	749.94	686.47	256.
470.00	8.458	.12670-2	.062859	2.309	2.477	2.288	774.51	709.49	260.
480.00	8.262	.12352-2	.064518	2.350	2.516	2.340	799.48	732.90	263.
490.00	8.075	.12051-2	.066163	2.390	2.555	2.393	824.83	756.72	266.
500.00	7.897	.11767-2	.067797	2.429	2.593	2.445	850.57	780.92	269.
510.00	7.728	.11497-2	.069420	2.468	2.631	2.496	876.68	805.51	272.
520.00	7.566	.11240-2	.071033	2.506	2.668	2.548	903.18	830.48	275.
530.00	7.411	.10996-2	.072637	2.544	2.705	2.599	930.04	855.82	278.
540.00	7.263	.10764-2	.074233	2.581	2.741	2.650	957.26	881.54	281.
550.00	7.121	.10541-2	.075821	2.617	2.776	2.700	984.85	907.61	284.
560.00	6.985	.10329-2	.077401	2.653	2.811	2.751	1012.79	934.05	286.
570.00	6.854	.10126-2	.078975	2.689	2.846	2.801	1041.08	960.83	289.
580.00	6.728	.99307-3	.080542	2.723	2.880	2.851	1069.71	987.96	292.
590.00	6.607	.97437-3	.082104	2.757	2.914	2.900	1098.68	1015.44	295.
600.00	6.491	.95642-3	.083660	2.791	2.947	2.949	1127.98	1043.25	297.
610.00	6.378	.93915-3	.085211	2.824	2.979	2.998	1157.61	1071.39	300.
620.00	6.270	.92254-3	.086757	2.857	3.011	3.047	1187.57	1099.85	302.
630.00	6.166	.90655-3	.088299	2.889	3.043	3.096	1217.84	1128.63	305.
640.00	6.065	.89113-3	.089836	2.920	3.074	3.144	1248.42	1157.73	308.
650.00	5.967	.87625-3	.091370	2.951	3.104	3.192	1279.31	1187.14	310.
660.00	5.873	.86189-3	.092899	2.981	3.135	3.239	1310.51	1216.86	313.
670.00	5.782	.84802-3	.094426	3.011	3.164	3.287	1342.00	1246.87	315.
680.00	5.693	.83461-3	.095948	3.041	3.193	3.334	1373.79	1277.18	317.
690.00	5.608	.82164-3	.097468	3.070	3.222	3.381	1405.87	1307.79	320.
700.00	5.525	.80908-3	.098984	3.099	3.250	3.427	1438.23	1338.67	322.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

.60 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND
				- - KJ/KG /DEG K) - -			- - KJ/KG	- -	M/SEC
250.00	606.595	.75317	.71076	1.630	2.173	-.099	-24.60	-25.59	973.
260.00	595.840	.70616	.64643	1.650	2.215	-.013	-2.66	-3.67	932.
270.00	584.728	.65892	.58264	1.673	2.261	.071	19.72	18.69	887.
280.00	573.199	.61184	.52019	1.699	2.312	.154	42.58	41.53	841.
290.00	561.177	.56518	.45959	1.730	2.370	.236	65.99	64.92	794.
300.00	548.569	.51910	.40118	1.764	2.434	.318	90.00	88.90	744.
310.00	535.251	.47367	.34514	1.803	2.506	.399	114.69	113.57	693.
317.93	524.081	.43808	.30243	1.836	2.570	.463	134.80	133.66	651.
317.93	15.395	.26133-2	.032422	1.672	1.954	1.426	440.99	402.02	195.
320.00	15.231	.25717-2	.032979	1.679	1.956	1.439	445.04	405.65	196.
330.00	14.506	.23965-2	.035530	1.716	1.969	1.499	464.66	423.30	202.
340.00	13.874	.22532-2	.037902	1.755	1.992	1.558	484.46	441.21	207.
350.00	13.312	.21328-2	.040139	1.797	2.021	1.616	504.52	459.45	212.
360.00	12.807	.20294-2	.042272	1.839	2.053	1.673	524.88	478.03	217.
370.00	12.349	.19391-2	.044323	1.882	2.088	1.730	545.59	497.00	222.
380.00	11.930	.18592-2	.046307	1.926	2.125	1.786	566.65	516.35	226.
390.00	11.544	.17876-2	.048236	1.969	2.163	1.842	588.09	536.11	230.
400.00	11.187	.17229-2	.050119	2.013	2.202	1.897	609.91	556.28	234.
410.00	10.855	.16639-2	.051964	2.056	2.242	1.952	632.13	576.86	238.
420.00	10.546	.16098-2	.053774	2.099	2.281	2.007	654.75	597.85	242.
430.00	10.256	.15599-2	.055556	2.142	2.321	2.061	677.76	619.26	245.
440.00	9.984	.15136-2	.057313	2.185	2.361	2.115	701.17	641.08	249.
450.00	9.727	.14705-2	.059047	2.227	2.401	2.168	724.99	663.31	252.
460.00	9.485	.14302-2	.060761	2.269	2.441	2.221	749.20	685.94	256.
470.00	9.256	.13923-2	.062458	2.310	2.480	2.274	773.80	708.98	259.
480.00	9.039	.13568-2	.064139	2.350	2.519	2.327	798.79	732.42	262.
490.00	8.833	.13233-2	.065805	2.390	2.557	2.379	824.18	756.25	265.
500.00	8.637	.12916-2	.067458	2.430	2.595	2.431	849.94	780.47	268.
510.00	8.450	.12615-2	.069099	2.468	2.633	2.483	876.08	805.07	271.
520.00	8.271	.12330-2	.070729	2.507	2.670	2.535	902.60	830.06	274.
530.00	8.101	.12059-2	.072349	2.544	2.707	2.586	929.48	855.41	277.
540.00	7.938	.11801-2	.073960	2.581	2.743	2.637	956.73	881.14	280.
550.00	7.781	.11555-2	.075562	2.618	2.778	2.687	984.33	907.22	283.
560.00	7.632	.11319-2	.077156	2.654	2.813	2.738	1012.29	933.67	286.
570.00	7.488	.11094-2	.078743	2.689	2.848	2.788	1040.59	960.47	289.
580.00	7.350	.10879-2	.080323	2.724	2.882	2.838	1069.24	987.61	292.
590.00	7.217	.10672-2	.081897	2.758	2.915	2.887	1098.23	1015.09	294.
600.00	7.089	.10474-2	.083464	2.791	2.948	2.936	1127.55	1042.91	297.
610.00	6.966	.10283-2	.085026	2.824	2.981	2.985	1157.19	1071.06	300.
620.00	6.847	.10100-2	.086583	2.857	3.013	3.034	1187.16	1099.53	302.
630.00	6.732	.99232-3	.088135	2.889	3.044	3.083	1217.44	1128.32	305.
640.00	6.622	.97532-3	.089682	2.920	3.075	3.131	1248.04	1157.43	307.
650.00	6.515	.95892-3	.091225	2.951	3.106	3.179	1278.94	1186.84	310.
660.00	6.412	.94310-3	.092764	2.982	3.136	3.226	1310.15	1216.56	312.
670.00	6.312	.92782-3	.094298	3.012	3.165	3.274	1341.65	1246.59	315.
680.00	6.215	.91306-3	.095830	3.041	3.194	3.321	1373.45	1276.90	317.
690.00	6.121	.89878-3	.097357	3.070	3.223	3.368	1405.53	1307.51	320.
700.00	6.030	.88496-3	.098881	3.099	3.251	3.414	1437.91	1338.40	322.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

.70 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND
				- - KJ/KG /DEG K) - -			- - KJ/KG	- -	M/SEC
250.00	606.736	.75505	.71340	1.629	2.172	-.100	-24.50	-25.66	975.
260.00	595.994	.70792	.64895	1.649	2.215	-.014	-2.57	-3.75	933.
270.00	584.899	.66060	.58508	1.672	2.260	.071	19.80	18.60	889.
280.00	573.391	.61346	.52257	1.698	2.311	.154	42.66	41.43	843.
290.00	561.394	.56677	.46194	1.729	2.369	.236	66.05	64.80	796.
300.00	548.817	.52069	.40351	1.763	2.433	.317	90.05	88.78	746.
310.00	535.540	.47527	.34747	1.802	2.504	.398	114.73	113.42	695.
320.00	521.395	.43049	.29386	1.843	2.586	.479	140.17	138.83	642.
324.10	515.288	.41226	.27256	1.861	2.623	.512	150.86	149.50	620.
324.10	17.970	.31150-2	.031542	1.710	2.019	1.432	448.93	409.97	193.
330.00	17.416	.29707-2	.033209	1.730	2.019	1.468	460.83	420.63	197.
340.00	16.586	.27668-2	.035840	1.766	2.030	1.529	481.06	438.86	203.
350.00	15.862	.26002-2	.038283	1.805	2.051	1.588	501.46	457.33	209.
360.00	15.221	.24603-2	.040583	1.846	2.078	1.646	522.10	476.11	214.
370.00	14.645	.23405-2	.042774	1.888	2.109	1.703	543.02	495.23	219.
380.00	14.123	.22359-2	.044878	1.930	2.142	1.760	564.28	514.71	223.
390.00	13.646	.21434-2	.046910	1.973	2.178	1.816	585.88	534.58	228.
400.00	13.207	.20606-2	.048884	2.016	2.215	1.872	607.84	554.84	232.
410.00	12.802	.19859-2	.050809	2.059	2.253	1.927	630.18	575.50	236.
420.00	12.424	.19178-2	.052693	2.102	2.292	1.981	652.91	596.57	240.
430.00	12.073	.18554-2	.054540	2.145	2.331	2.036	676.02	618.04	243.
440.00	11.743	.17978-2	.056357	2.187	2.370	2.090	699.52	639.91	247.
450.00	11.434	.17445-2	.058146	2.229	2.409	2.144	723.42	662.19	251.
460.00	11.143	.16948-2	.059911	2.270	2.448	2.197	747.70	684.88	254.
470.00	10.868	.16484-2	.061655	2.311	2.486	2.250	772.37	707.96	258.
480.00	10.607	.16049-2	.063380	2.351	2.525	2.303	797.42	731.43	261.
490.00	10.361	.15640-2	.065087	2.391	2.563	2.355	822.86	755.30	264.
500.00	10.126	.15255-2	.066779	2.431	2.600	2.407	848.68	779.55	267.
510.00	9.904	.14890-2	.068456	2.469	2.638	2.459	874.87	804.19	270.
520.00	9.691	.14545-2	.070120	2.507	2.674	2.511	901.43	829.20	273.
530.00	9.488	.14218-2	.071773	2.545	2.711	2.562	928.36	854.59	276.
540.00	9.295	.13906-2	.073414	2.582	2.747	2.613	955.65	880.34	279.
550.00	9.109	.13609-2	.075045	2.618	2.782	2.664	983.29	906.45	282.
560.00	8.932	.13327-2	.076667	2.654	2.817	2.714	1011.28	932.91	285.
570.00	8.762	.13056-2	.078281	2.689	2.851	2.764	1039.62	959.73	288.
580.00	8.598	.12798-2	.079886	2.724	2.885	2.814	1068.31	986.89	291.
590.00	8.441	.12550-2	.081484	2.758	2.918	2.864	1097.32	1014.39	294.
600.00	8.290	.12313-2	.083074	2.792	2.951	2.913	1126.67	1042.23	296.
610.00	8.145	.12085-2	.084658	2.825	2.983	2.962	1156.34	1070.39	299.
620.00	8.004	.11866-2	.086236	2.857	3.015	3.011	1186.33	1098.88	302.
630.00	7.869	.11656-2	.087808	2.889	3.047	3.060	1216.64	1127.69	304.
640.00	7.739	.11453-2	.089375	2.921	3.077	3.108	1247.26	1156.81	307.
650.00	7.613	.11258-2	.090936	2.952	3.108	3.156	1278.19	1186.24	309.
660.00	7.491	.11070-2	.092493	2.982	3.138	3.203	1309.42	1215.98	312.
670.00	7.373	.10888-2	.094045	3.012	3.167	3.251	1340.94	1246.01	314.
680.00	7.259	.10712-2	.095593	3.041	3.196	3.298	1372.76	1276.34	317.
690.00	7.149	.10543-2	.097137	3.070	3.225	3.345	1404.87	1306.96	319.
700.00	7.042	.10379-2	.098677	3.099	3.253	3.391	1437.26	1337.86	322.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

.80 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV - - KJ/KG /DEG K) - -	CP	S*	H* - - KJ/KG	U - -	VEL SND M/SEC
250.00	606.876	.75693	.71603	1.628	2.172	-.100	-24.41	-25.73	977.
260.00	596.148	.70968	.65147	1.649	2.214	-.014	-2.48	-3.83	935.
270.00	585.070	.66227	.58752	1.671	2.260	.070	19.88	18.51	891.
280.00	573.581	.61507	.52495	1.697	2.311	.153	42.73	41.34	845.
290.00	561.610	.56836	.46428	1.728	2.368	.236	66.12	64.69	798.
300.00	549.064	.52227	.40583	1.763	2.431	.317	90.11	88.65	748.
310.00	535.826	.47687	.34979	1.801	2.503	.398	114.77	113.28	697.
320.00	521.734	.43213	.29620	1.842	2.584	.478	140.19	138.66	644.
329.66	507.093	.38942	.24673	1.885	2.673	.557	165.57	163.99	591.
329.66	20.585	.36398-2	.030623	1.745	2.081	1.437	455.95	417.08	191.
330.00	20.544	.36286-2	.030730	1.746	2.081	1.440	456.66	417.72	191.
340.00	19.463	.33413-2	.033671	1.778	2.076	1.502	477.42	436.32	198.
350.00	18.542	.31139-2	.036351	1.815	2.086	1.562	498.23	455.08	204.
360.00	17.739	.29277-2	.038840	1.853	2.106	1.621	519.18	474.08	210.
370.00	17.027	.27711-2	.041186	1.894	2.132	1.679	540.36	493.38	215.
380.00	16.388	.26367-2	.043419	1.935	2.162	1.736	561.83	513.01	220.
390.00	15.809	.25194-2	.045562	1.977	2.195	1.793	583.60	533.00	225.
400.00	15.280	.24156-2	.047633	2.020	2.229	1.849	605.72	553.36	229.
410.00	14.793	.23227-2	.049643	2.062	2.266	1.904	628.20	574.12	234.
420.00	14.342	.22387-2	.051602	2.104	2.303	1.959	651.04	595.26	238.
430.00	13.924	.21623-2	.053518	2.147	2.341	2.014	674.25	616.80	242.
440.00	13.533	.20922-2	.055396	2.189	2.379	2.068	697.85	638.73	245.
450.00	13.167	.20275-2	.057242	2.230	2.417	2.122	721.83	661.07	249.
460.00	12.824	.19676-2	.059059	2.272	2.455	2.176	746.18	683.80	253.
470.00	12.500	.19119-2	.060851	2.312	2.493	2.229	770.92	706.93	256.
480.00	12.195	.18598-2	.062620	2.353	2.531	2.282	796.04	730.44	260.
490.00	11.906	.18109-2	.064369	2.392	2.568	2.334	821.54	754.35	263.
500.00	11.632	.17650-2	.066099	2.432	2.606	2.386	847.41	778.64	266.
510.00	11.371	.17217-2	.067813	2.470	2.643	2.438	873.66	803.30	269.
520.00	11.123	.16808-2	.069512	2.508	2.679	2.490	900.26	828.34	272.
530.00	10.887	.16420-2	.071197	2.546	2.715	2.541	927.24	853.76	276.
540.00	10.662	.16052-2	.072869	2.583	2.751	2.593	954.56	879.53	279.
550.00	10.447	.15702-2	.074530	2.619	2.786	2.643	982.25	905.67	282.
560.00	10.240	.15369-2	.076180	2.655	2.820	2.694	1010.28	932.16	284.
570.00	10.043	.15051-2	.077819	2.690	2.854	2.744	1038.65	958.99	287.
580.00	9.853	.14748-2	.079450	2.725	2.888	2.794	1067.37	986.18	290.
590.00	9.671	.14458-2	.081071	2.759	2.921	2.844	1096.41	1013.70	293.
600.00	9.497	.14180-2	.082685	2.792	2.954	2.893	1125.79	1041.55	296.
610.00	9.328	.13913-2	.084291	2.825	2.986	2.942	1155.49	1069.73	298.
620.00	9.166	.13657-2	.085890	2.858	3.018	2.991	1185.51	1098.24	301.
630.00	9.010	.13411-2	.087483	2.890	3.049	3.039	1215.85	1127.06	304.
640.00	8.860	.13175-2	.089069	2.921	3.080	3.088	1246.49	1156.19	306.
650.00	8.714	.12947-2	.090649	2.952	3.110	3.136	1277.44	1185.64	309.
660.00	8.574	.12727-2	.092224	2.982	3.140	3.183	1308.69	1215.39	312.
670.00	8.438	.12516-2	.093793	3.012	3.169	3.231	1340.24	1245.43	314.
680.00	8.307	.12312-2	.095358	3.042	3.198	3.278	1372.08	1275.77	317.
690.00	8.180	.12114-2	.096918	3.071	3.227	3.325	1404.20	1306.40	319.
700.00	8.057	.11924-2	.098473	3.099	3.255	3.372	1436.61	1337.32	322.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

.90 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND
				- - KJ/KG /DEG K) - -			- - KJ/KG	- -	M/SEC
250.00	607.015	.75881	.71865	1.628	2.171	-.100	-24.32	-25.80	979.
260.00	596.301	.71143	.65399	1.648	2.214	-.014	-2.40	-3.90	937.
270.00	585.240	.66393	.58996	1.670	2.259	.070	19.96	18.43	893.
280.00	573.772	.61668	.52733	1.696	2.310	.153	42.80	41.24	847.
290.00	561.825	.56993	.46662	1.727	2.367	.235	66.18	64.58	800.
300.00	549.310	.52384	.40815	1.762	2.430	.316	90.16	88.52	750.
310.00	536.111	.47846	.35210	1.800	2.501	.397	114.81	113.13	699.
320.00	522.071	.43377	.29853	1.841	2.581	.478	140.21	138.49	647.
330.00	506.959	.38963	.24739	1.886	2.674	.559	166.48	164.70	592.
334.72	499.358	.36890	.22406	1.908	2.723	.597	179.22	177.41	566.
334.72	23.245	.41887-2	.029678	1.777	2.144	1.443	462.23	423.51	189.
340.00	22.538	.39904-2	.031376	1.793	2.132	1.476	473.51	433.57	193.
350.00	21.372	.36822-2	.034333	1.826	2.128	1.538	494.79	452.68	200.
360.00	20.375	.34367-2	.037037	1.862	2.138	1.598	516.12	471.95	206.
370.00	19.505	.32347-2	.039554	1.900	2.158	1.657	537.59	491.45	212.
380.00	18.732	.30643-2	.041928	1.941	2.183	1.714	559.29	511.25	217.
390.00	18.037	.29175-2	.044191	1.982	2.213	1.772	581.27	531.37	222.
400.00	17.407	.27892-2	.046364	2.023	2.245	1.828	603.55	551.85	227.
410.00	16.831	.26754-2	.048463	2.065	2.279	1.884	626.17	572.70	231.
420.00	16.301	.25734-2	.050501	2.107	2.314	1.939	649.14	593.92	236.
430.00	15.810	.24812-2	.052487	2.149	2.351	1.994	672.46	615.54	240.
440.00	15.354	.23972-2	.054430	2.191	2.388	2.048	696.15	637.54	244.
450.00	14.928	.23200-2	.056333	2.232	2.425	2.103	720.22	659.93	247.
460.00	14.529	.22489-2	.058203	2.273	2.462	2.156	744.66	682.71	251.
470.00	14.155	.21829-2	.060044	2.314	2.500	2.210	769.47	705.88	255.
480.00	13.801	.21215-2	.061859	2.354	2.537	2.263	794.65	729.44	258.
490.00	13.468	.20641-2	.063650	2.393	2.574	2.315	820.21	753.39	262.
500.00	13.152	.20103-2	.065420	2.433	2.611	2.368	846.14	777.71	265.
510.00	12.853	.19596-2	.067171	2.471	2.648	2.420	872.43	802.41	268.
520.00	12.568	.19119-2	.068904	2.509	2.684	2.472	899.09	827.48	271.
530.00	12.298	.18667-2	.070622	2.547	2.719	2.523	926.11	852.92	275.
540.00	12.039	.18240-2	.072325	2.583	2.755	2.574	953.48	878.72	278.
550.00	11.793	.17834-2	.074015	2.620	2.790	2.625	981.20	904.88	281.
560.00	11.557	.17448-2	.075693	2.655	2.824	2.676	1009.27	931.39	284.
570.00	11.332	.17080-2	.077359	2.691	2.858	2.726	1037.68	958.25	287.
580.00	11.115	.16729-2	.079015	2.725	2.891	2.776	1066.42	985.46	290.
590.00	10.908	.16394-2	.080661	2.759	2.924	2.826	1095.50	1013.00	292.
600.00	10.709	.16074-2	.082298	2.793	2.957	2.875	1124.91	1040.87	295.
610.00	10.517	.15767-2	.083926	2.826	2.989	2.924	1154.64	1069.07	298.
620.00	10.333	.15472-2	.085546	2.858	3.020	2.973	1184.69	1097.59	301.
630.00	10.155	.15189-2	.087158	2.890	3.052	3.022	1215.05	1126.43	303.
640.00	9.984	.14918-2	.088764	2.921	3.082	3.070	1245.72	1155.58	306.
650.00	9.819	.14656-2	.090363	2.952	3.112	3.118	1276.69	1185.03	309.
660.00	9.660	.14405-2	.091956	2.983	3.142	3.166	1307.96	1214.79	311.
670.00	9.506	.14162-2	.093542	3.013	3.171	3.213	1339.53	1244.85	314.
680.00	9.357	.13928-2	.095124	3.042	3.200	3.260	1371.39	1275.21	316.
690.00	9.213	.13703-2	.096700	3.071	3.229	3.307	1403.54	1305.85	319.
700.00	9.073	.13485-2	.098271	3.100	3.257	3.354	1435.97	1336.78	321.

H* = H(T) - H(N.B.T.LIQUID) AND
S* = S(T) - S(N.B.T.LIQUID)

1.00 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV - - KJ/KG /DEG K) - -	CP	S*	H* - - KJ/KG	U - -	VEL SND M/SEC
250.00	607.154	.76067	.72127	1.627	2.171	-.101	-24.22	-25.87	981.
260.00	596.454	.71317	.65650	1.647	2.213	-.015	-2.31	-3.98	939.
270.00	585.409	.66559	.59238	1.669	2.258	.070	20.05	18.34	895.
280.00	573.961	.61828	.52969	1.696	2.309	.153	42.88	41.14	849.
290.00	562.038	.57150	.46895	1.726	2.366	.235	66.25	64.47	802.
300.00	549.554	.52540	.41046	1.761	2.429	.316	90.21	88.39	752.
310.00	536.394	.48004	.35441	1.799	2.499	.397	114.85	112.98	702.
320.00	522.404	.43539	.30085	1.840	2.579	.477	140.23	138.32	649.
330.00	507.362	.39133	.24976	1.885	2.671	.558	166.47	164.50	595.
339.39	491.983	.35026	.20392	1.929	2.773	.634	192.00	189.97	541.
339.39	25.956	.47625-2	.028713	1.808	2.206	1.447	467.90	429.37	187.
340.00	25.855	.47327-2	.028928	1.809	2.203	1.451	469.25	430.57	188.
350.00	24.377	.43159-2	.032216	1.838	2.179	1.515	491.13	450.11	195.
360.00	23.145	.39942-2	.035166	1.871	2.176	1.576	512.89	469.69	202.
370.00	22.088	.37356-2	.037874	1.908	2.187	1.636	534.70	489.43	208.
380.00	21.161	.35214-2	.040403	1.947	2.207	1.694	556.67	509.41	214.
390.00	20.337	.33398-2	.042794	1.986	2.232	1.752	578.86	529.69	219.
400.00	19.595	.31828-2	.045076	2.027	2.261	1.809	601.33	550.29	224.
410.00	18.920	.30451-2	.047270	2.069	2.293	1.865	624.10	571.25	229.
420.00	18.303	.29227-2	.049390	2.110	2.327	1.921	647.20	592.56	233.
430.00	17.735	.28128-2	.051450	2.151	2.362	1.976	670.64	614.25	238.
440.00	17.208	.27132-2	.053458	2.193	2.397	2.031	694.43	636.32	242.
450.00	16.718	.26224-2	.055421	2.234	2.434	2.085	718.59	658.77	246.
460.00	16.260	.25389-2	.057346	2.275	2.470	2.139	743.11	681.61	250.
470.00	15.831	.24618-2	.059236	2.315	2.507	2.192	768.00	704.83	253.
480.00	15.428	.23903-2	.061097	2.355	2.544	2.245	793.25	728.43	257.
490.00	15.048	.23237-2	.062931	2.395	2.580	2.298	818.87	752.42	260.
500.00	14.689	.22614-2	.064740	2.434	2.617	2.351	844.86	776.78	264.
510.00	14.349	.22029-2	.066529	2.472	2.653	2.403	871.20	801.51	267.
520.00	14.026	.21479-2	.068297	2.510	2.688	2.455	897.91	826.61	270.
530.00	13.719	.20960-2	.070048	2.547	2.724	2.506	924.97	852.08	274.
540.00	13.427	.20469-2	.071783	2.584	2.759	2.558	952.39	877.91	277.
550.00	13.149	.20004-2	.073502	2.620	2.794	2.609	980.15	904.10	280.
560.00	12.883	.19563-2	.075208	2.656	2.828	2.659	1008.25	930.63	283.
570.00	12.628	.19143-2	.076901	2.691	2.861	2.710	1036.70	957.51	286.
580.00	12.385	.18742-2	.078582	2.726	2.895	2.760	1065.48	984.74	289.
590.00	12.151	.18360-2	.080252	2.760	2.927	2.809	1094.59	1012.29	292.
600.00	11.927	.17995-2	.081911	2.793	2.960	2.859	1124.03	1040.18	295.
610.00	11.711	.17646-2	.083562	2.826	2.992	2.908	1153.79	1068.40	297.
620.00	11.504	.17312-2	.085203	2.858	3.023	2.957	1183.86	1096.94	300.
630.00	11.305	.16991-2	.086836	2.890	3.054	3.006	1214.25	1125.79	303.
640.00	11.113	.16682-2	.088461	2.922	3.085	3.054	1244.94	1154.96	306.
650.00	10.928	.16386-2	.090078	2.952	3.115	3.102	1275.94	1184.43	308.
660.00	10.749	.16101-2	.091689	2.983	3.144	3.150	1307.24	1214.20	311.
670.00	10.576	.15827-2	.093293	3.013	3.174	3.197	1338.83	1244.28	313.
680.00	10.409	.15562-2	.094891	3.042	3.202	3.244	1370.71	1274.64	316.
690.00	10.248	.15307-2	.096483	3.071	3.231	3.291	1402.87	1305.30	319.
700.00	10.092	.15061-2	.098070	3.100	3.259	3.338	1435.32	1336.23	321.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

1.20 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND
				- - KJ/KG /DEG K) - -			- - KJ/KG - -		M/SEC
250.00	607.430	.76438	.72649	1.625	2.170	-.101	-24.04	-26.01	985.
260.00	596.757	.71664	.66150	1.645	2.212	-.015	-2.13	-4.14	943.
270.00	585.745	.66888	.59722	1.668	2.257	.069	20.21	18.16	899.
280.00	574.337	.62146	.53442	1.694	2.307	.152	43.03	40.94	853.
290.00	562.463	.57461	.47359	1.725	2.364	.234	66.38	64.25	806.
300.00	550.039	.52850	.41506	1.759	2.426	.315	90.32	88.14	757.
310.00	536.955	.48317	.35900	1.797	2.496	.396	114.93	112.70	706.
320.00	523.064	.43861	.30548	1.838	2.575	.476	140.28	137.98	654.
330.00	508.155	.39470	.25445	1.882	2.665	.557	166.47	164.10	600.
340.00	491.910	.35119	.20582	1.929	2.771	.638	193.63	191.19	544.
347.77	478.040	.31738	.16955	1.968	2.873	.702	215.54	213.03	497.
347.77	31.551	.59897-2	.026740	1.864	2.333	1.456	477.76	439.73	183.
350.00	31.066	.58408-2	.027610	1.869	2.317	1.470	482.94	444.31	185.
360.00	29.176	.52893-2	.031181	1.894	2.274	1.535	505.86	464.73	193.
370.00	27.627	.48708-2	.034351	1.925	2.260	1.597	528.51	485.07	201.
380.00	26.314	.45387-2	.037239	1.960	2.264	1.657	551.12	505.52	207.
390.00	25.174	.42662-2	.039920	1.997	2.278	1.716	573.82	526.15	213.
400.00	24.166	.40370-2	.042442	2.036	2.299	1.774	596.70	547.04	219.
410.00	23.264	.38402-2	.044840	2.076	2.325	1.831	619.82	568.24	224.
420.00	22.448	.36684-2	.047138	2.116	2.354	1.888	643.21	589.75	229.
430.00	21.703	.35165-2	.049352	2.157	2.385	1.944	666.91	611.62	234.
440.00	21.019	.33806-2	.051498	2.197	2.418	1.999	690.92	633.83	238.
450.00	20.388	.32580-2	.053586	2.238	2.452	2.053	715.28	656.42	242.
460.00	19.801	.31464-2	.055622	2.278	2.487	2.108	739.97	679.37	246.
470.00	19.255	.30442-2	.057616	2.318	2.522	2.162	765.02	702.69	250.
480.00	18.743	.29500-2	.059571	2.358	2.557	2.215	790.41	726.39	254.
490.00	18.263	.28628-2	.061492	2.397	2.593	2.268	816.16	750.46	258.
500.00	17.811	.27818-2	.063383	2.436	2.628	2.321	842.27	774.89	262.
510.00	17.384	.27061-2	.065247	2.474	2.663	2.373	868.72	799.70	265.
520.00	16.981	.26351-2	.067086	2.512	2.698	2.425	895.53	824.86	268.
530.00	16.598	.25685-2	.068903	2.549	2.733	2.477	922.69	850.39	272.
540.00	16.235	.25057-2	.070701	2.585	2.767	2.528	950.19	876.28	275.
550.00	15.889	.24464-2	.072480	2.622	2.801	2.580	978.04	902.51	278.
560.00	15.559	.23903-2	.074241	2.657	2.835	2.630	1006.22	929.09	281.
570.00	15.245	.23370-2	.075988	2.692	2.868	2.681	1034.74	956.02	285.
580.00	14.944	.22864-2	.077720	2.727	2.901	2.731	1063.59	983.29	288.
590.00	14.656	.22382-2	.079438	2.761	2.934	2.781	1092.76	1010.88	291.
600.00	14.380	.21923-2	.081144	2.794	2.966	2.830	1122.26	1038.81	293.
610.00	14.115	.21484-2	.082838	2.827	2.997	2.880	1152.08	1067.06	296.
620.00	13.861	.21064-2	.084522	2.859	3.029	2.929	1182.21	1095.63	299.
630.00	13.617	.20663-2	.086195	2.891	3.059	2.977	1212.65	1124.52	302.
640.00	13.381	.20278-2	.087859	2.922	3.090	3.026	1243.39	1153.72	305.
650.00	13.155	.19908-2	.089514	2.953	3.119	3.074	1274.44	1183.22	307.
660.00	12.936	.19553-2	.091161	2.983	3.149	3.122	1305.78	1213.02	310.
670.00	12.726	.19212-2	.092799	3.013	3.178	3.169	1337.41	1243.12	313.
680.00	12.522	.18883-2	.094431	3.043	3.207	3.217	1369.34	1273.51	315.
690.00	12.326	.18566-2	.096055	3.072	3.235	3.264	1401.54	1304.19	318.
700.00	12.136	.18261-2	.097672	3.100	3.263	3.310	1434.03	1335.15	321.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

1.40 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND
				- - KJ/KG /DEG K) - -			- - KJ/KG	- -	M/SEC
250.00	607.705	.76806	.73170	1.623	2.169	-.102	-23.85	-26.15	989.
260.00	597.058	.72007	.66649	1.643	2.211	-.016	-1.95	-4.30	947.
270.00	586.079	.67214	.60204	1.666	2.256	.068	20.38	17.99	903.
280.00	574.709	.62461	.53912	1.692	2.306	.151	43.18	40.75	857.
290.00	562.883	.57770	.47821	1.723	2.362	.233	66.51	64.03	810.
300.00	550.518	.53156	.41964	1.757	2.424	.314	90.44	87.89	761.
310.00	537.509	.48626	.36357	1.795	2.493	.395	115.02	112.41	711.
320.00	523.714	.44178	.31007	1.836	2.571	.475	140.33	137.65	659.
330.00	508.934	.39801	.25911	1.880	2.659	.556	166.47	163.71	605.
340.00	492.870	.35473	.21060	1.927	2.763	.637	193.56	190.72	550.
350.00	475.039	.31152	.16433	1.977	2.893	.718	221.81	218.87	490.
355.19	464.827	.28889	.14110	2.004	2.977	.762	237.03	234.02	458.
355.19	37.411	.73312-2	.024732	1.915	2.467	1.463	486.04	448.62	178.
360.00	36.081	.69124-2	.026778	1.923	2.417	1.496	497.79	458.98	183.
370.00	33.792	.62337-2	.030559	1.947	2.359	1.561	521.62	480.19	192.
380.00	31.939	.57238-2	.033894	1.977	2.337	1.623	545.08	501.25	200.
390.00	30.380	.53219-2	.036920	2.010	2.334	1.684	568.42	522.34	207.
400.00	29.035	.49939-2	.039720	2.046	2.344	1.743	591.81	543.59	213.
410.00	27.852	.47191-2	.042348	2.084	2.362	1.801	615.33	565.07	219.
420.00	26.797	.44840-2	.044840	2.123	2.385	1.858	639.06	586.82	224.
430.00	25.845	.42794-2	.047223	2.162	2.412	1.915	663.05	608.88	230.
440.00	24.979	.40989-2	.049517	2.202	2.441	1.971	687.31	631.27	234.
450.00	24.186	.39378-2	.051735	2.242	2.472	2.026	711.88	653.99	239.
460.00	23.454	.37927-2	.053890	2.282	2.505	2.081	736.76	677.07	243.
470.00	22.776	.36610-2	.055990	2.321	2.538	2.135	761.98	700.51	247.
480.00	22.144	.35405-2	.058042	2.360	2.572	2.189	787.53	724.30	251.
490.00	21.554	.34297-2	.060053	2.399	2.606	2.242	813.41	748.46	255.
500.00	21.001	.33272-2	.062027	2.438	2.640	2.295	839.64	772.98	259.
510.00	20.480	.32320-2	.063968	2.476	2.674	2.348	866.22	797.86	263.
520.00	19.989	.31432-2	.065879	2.513	2.708	2.400	893.13	823.09	266.
530.00	19.525	.30601-2	.067764	2.550	2.742	2.452	920.39	848.68	270.
540.00	19.085	.29821-2	.069625	2.587	2.776	2.503	947.98	874.62	273.
550.00	18.668	.29086-2	.071463	2.623	2.810	2.555	975.91	900.91	277.
560.00	18.271	.28393-2	.073282	2.658	2.843	2.606	1004.17	927.55	280.
570.00	17.892	.27737-2	.075082	2.693	2.876	2.656	1032.77	954.52	283.
580.00	17.531	.27116-2	.076865	2.728	2.908	2.706	1061.69	981.83	286.
590.00	17.186	.26525-2	.078631	2.761	2.940	2.756	1090.93	1009.47	289.
600.00	16.856	.25964-2	.080384	2.795	2.972	2.806	1120.49	1037.43	292.
610.00	16.540	.25428-2	.082122	2.828	3.003	2.855	1150.36	1065.72	295.
620.00	16.237	.24917-2	.083848	2.860	3.034	2.905	1180.55	1094.33	298.
630.00	15.945	.24429-2	.085562	2.892	3.064	2.953	1211.04	1123.24	301.
640.00	15.666	.23961-2	.087265	2.923	3.095	3.002	1241.84	1152.47	304.
650.00	15.396	.23513-2	.088957	2.954	3.124	3.050	1272.93	1182.00	307.
660.00	15.137	.23083-2	.090639	2.984	3.153	3.098	1304.32	1211.83	309.
670.00	14.887	.22671-2	.092312	3.014	3.182	3.146	1336.00	1241.96	312.
680.00	14.645	.22274-2	.093976	3.043	3.211	3.193	1367.96	1272.37	315.
690.00	14.412	.21892-2	.095632	3.072	3.239	3.240	1400.21	1303.07	318.
700.00	14.187	.21524-2	.097281	3.101	3.266	3.287	1432.74	1334.06	320.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

1.50 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV - - KJ/KG /DEG K) - -	CP	S*	H* - - KJ/KG	U - -	VEL SND M/SEC
250.00	607.841	.76989	.73429	1.622	2.169	-.102	-23.76	-26.23	991.
260.00	597.208	.72178	.66897	1.643	2.210	-.016	-1.86	-4.38	949.
270.00	586.245	.67376	.60445	1.665	2.255	.068	20.46	17.90	905.
280.00	574.894	.62617	.54146	1.692	2.305	.151	43.26	40.65	859.
290.00	563.092	.57923	.48051	1.722	2.361	.233	66.58	63.92	812.
300.00	550.756	.53308	.42192	1.757	2.423	.314	90.49	87.77	763.
310.00	537.783	.48780	.36584	1.794	2.492	.394	115.06	112.27	713.
320.00	524.035	.44335	.31235	1.835	2.569	.475	140.35	137.49	661.
330.00	509.318	.39965	.26143	1.879	2.656	.555	166.47	163.52	608.
340.00	493.342	.35648	.21297	1.926	2.759	.636	193.53	190.49	552.
350.00	475.643	.31344	.16679	1.975	2.887	.718	221.73	218.58	494.
358.60	458.408	.27594	.12864	2.021	3.032	.789	247.17	243.90	439.
358.60	40.454	.80491-2	.023718	1.940	2.538	1.466	489.69	452.61	176.
360.00	39.992	.78991-2	.024363	1.941	2.518	1.476	493.21	455.71	178.
370.00	37.177	.70271-2	.028537	1.959	2.423	1.543	517.85	477.50	188.
380.00	34.968	.63945-2	.032141	1.986	2.381	1.607	541.84	498.94	196.
390.00	33.147	.59076-2	.035367	2.017	2.368	1.669	565.57	520.32	204.
400.00	31.598	.55170-2	.038322	2.052	2.370	1.729	589.25	541.77	210.
410.00	30.250	.51942-2	.041076	2.089	2.383	1.787	613.00	563.42	216.
420.00	29.057	.49209-2	.043674	2.127	2.402	1.845	636.92	585.30	222.
430.00	27.987	.46851-2	.046146	2.165	2.426	1.902	661.07	607.47	227.
440.00	27.020	.44786-2	.048517	2.205	2.454	1.958	685.46	629.95	232.
450.00	26.136	.42955-2	.050804	2.244	2.483	2.013	710.15	652.76	237.
460.00	25.325	.41314-2	.053020	2.283	2.514	2.068	735.13	675.90	242.
470.00	24.575	.39830-2	.055175	2.323	2.546	2.123	760.44	699.40	246.
480.00	23.879	.38478-2	.057277	2.362	2.579	2.177	786.06	723.25	250.
490.00	23.229	.37239-2	.059334	2.400	2.613	2.230	812.02	747.45	254.
500.00	22.622	.36096-2	.061350	2.439	2.646	2.283	838.32	772.01	258.
510.00	22.051	.35037-2	.063330	2.477	2.680	2.336	864.95	796.93	262.
520.00	21.514	.34052-2	.065278	2.514	2.714	2.388	891.92	822.20	265.
530.00	21.007	.33132-2	.067197	2.551	2.747	2.440	919.23	847.82	269.
540.00	20.527	.32270-2	.069089	2.588	2.781	2.492	946.87	873.79	272.
550.00	20.072	.31459-2	.070958	2.624	2.814	2.543	974.84	900.11	276.
560.00	19.640	.30696-2	.072805	2.659	2.847	2.594	1003.14	926.77	279.
570.00	19.228	.29974-2	.074632	2.694	2.879	2.645	1031.78	953.77	282.
580.00	18.836	.29291-2	.076440	2.728	2.912	2.695	1060.73	981.10	286.
590.00	18.461	.28643-2	.078231	2.762	2.943	2.745	1090.01	1008.76	289.
600.00	18.103	.28027-2	.080007	2.795	2.975	2.795	1119.60	1036.74	292.
610.00	17.760	.27440-2	.081767	2.828	3.006	2.845	1149.51	1065.05	295.
620.00	17.432	.26881-2	.083514	2.860	3.037	2.894	1179.72	1093.67	298.
630.00	17.116	.26347-2	.085248	2.892	3.067	2.943	1210.24	1122.61	301.
640.00	16.813	.25836-2	.086970	2.923	3.097	2.991	1241.06	1151.85	304.
650.00	16.522	.25347-2	.088681	2.954	3.127	3.039	1272.18	1181.39	306.
660.00	16.242	.24878-2	.090381	2.984	3.156	3.087	1303.59	1211.24	309.
670.00	15.971	.24428-2	.092071	3.014	3.184	3.135	1335.29	1241.37	312.
680.00	15.711	.23996-2	.093752	3.044	3.213	3.182	1367.28	1271.80	315.
690.00	15.459	.23580-2	.095424	3.072	3.241	3.229	1399.55	1302.52	317.
700.00	15.216	.23179-2	.097087	3.101	3.268	3.276	1432.09	1333.51	320.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

1.60 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND
				- - KJ/KG /DEG K) - -			- - KJ/KG	- -	M/SEC
250.00	607.977	.77171	.73688	1.621	2.168	-.102	-23.66	-26.30	993.
260.00	597.357	.72348	.67145	1.642	2.210	-.016	-1.78	-4.45	951.
270.00	586.410	.67538	.60684	1.664	2.255	.068	20.54	17.81	907.
280.00	575.079	.62773	.54380	1.691	2.304	.151	43.33	40.55	861.
290.00	563.299	.58075	.48281	1.721	2.360	.232	66.65	63.81	814.
300.00	550.992	.53460	.42419	1.756	2.421	.313	90.55	87.65	765.
310.00	538.055	.48932	.36811	1.794	2.490	.394	115.10	112.13	715.
320.00	524.354	.44491	.31463	1.834	2.567	.474	140.38	137.33	663.
330.00	509.699	.40128	.26373	1.878	2.654	.554	166.47	163.33	610.
340.00	493.809	.35821	.21533	1.924	2.755	.635	193.50	190.26	555.
350.00	476.238	.31533	.16924	1.974	2.880	.717	221.65	218.29	497.
360.00	456.187	.27195	.12517	2.027	3.050	.800	251.25	247.74	434.
361.86	452.074	.26372	.11715	2.038	3.089	.816	256.96	253.42	421.
361.86	43.583	.88008-2	.022699	1.963	2.613	1.468	493.04	456.33	174.
370.00	40.817	.79160-2	.026411	1.974	2.500	1.525	513.80	474.60	183.
380.00	38.170	.71282-2	.030326	1.996	2.433	1.591	538.43	496.51	192.
390.00	36.040	.65382-2	.033773	2.025	2.405	1.654	562.59	518.20	200.
400.00	34.257	.60739-2	.036898	2.058	2.399	1.714	586.60	539.89	207.
410.00	32.723	.56956-2	.039786	2.093	2.405	1.774	610.61	561.72	214.
420.00	31.378	.53790-2	.042494	2.130	2.421	1.832	634.74	583.74	220.
430.00	30.180	.51084-2	.045061	2.168	2.442	1.889	659.05	606.03	225.
440.00	29.102	.48731-2	.047512	2.207	2.467	1.945	683.59	628.61	230.
450.00	28.123	.46658-2	.049870	2.246	2.495	2.001	708.39	651.50	235.
460.00	27.227	.44809-2	.052148	2.285	2.524	2.056	733.48	674.72	240.
470.00	26.401	.43146-2	.054359	2.324	2.555	2.111	758.88	698.28	244.
480.00	25.636	.41636-2	.056512	2.363	2.587	2.165	784.59	722.18	249.
490.00	24.925	.40256-2	.058615	2.402	2.620	2.219	810.63	746.43	253.
500.00	24.261	.38988-2	.060674	2.440	2.653	2.272	836.99	771.04	257.
510.00	23.638	.37816-2	.062693	2.478	2.686	2.325	863.68	795.99	261.
520.00	23.053	.36727-2	.064678	2.515	2.719	2.377	890.71	821.30	264.
530.00	22.501	.35713-2	.066631	2.552	2.752	2.429	918.06	846.96	268.
540.00	21.980	.34765-2	.068556	2.588	2.785	2.481	945.75	872.96	272.
550.00	21.486	.33875-2	.070455	2.624	2.818	2.533	973.77	899.30	275.
560.00	21.018	.33037-2	.072330	2.660	2.851	2.584	1002.11	925.99	278.
570.00	20.572	.32247-2	.074184	2.694	2.883	2.634	1030.78	953.01	282.
580.00	20.148	.31500-2	.076018	2.729	2.915	2.685	1059.78	980.36	285.
590.00	19.743	.30792-2	.077833	2.762	2.947	2.735	1089.08	1008.04	288.
600.00	19.356	.30119-2	.079632	2.796	2.978	2.785	1118.71	1036.05	291.
610.00	18.986	.29480-2	.081414	2.828	3.009	2.834	1148.65	1064.37	294.
620.00	18.632	.28870-2	.083182	2.861	3.040	2.883	1178.89	1093.01	297.
630.00	18.292	.28289-2	.084936	2.892	3.070	2.932	1209.44	1121.96	300.
640.00	17.965	.27734-2	.086678	2.924	3.100	2.981	1240.28	1151.22	303.
650.00	17.651	.27202-2	.088407	2.954	3.129	3.029	1271.43	1180.78	306.
660.00	17.350	.26693-2	.090125	2.985	3.158	3.077	1302.86	1210.64	309.
670.00	17.059	.26204-2	.091832	3.014	3.187	3.125	1334.58	1240.79	312.
680.00	16.779	.25735-2	.093529	3.044	3.215	3.172	1366.59	1271.23	314.
690.00	16.508	.25284-2	.095217	3.073	3.243	3.219	1398.88	1301.96	317.
700.00	16.247	.24851-2	.096896	3.101	3.270	3.266	1431.45	1332.97	320.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

1.80 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND
				- - KJ/KG /DEG K) - -			- - KJ/KG - -		M/SEC
250.00	608.247	.77533	.74204	1.620	2.167	-.103	-23.48	-26.44	996.
260.00	597.654	.72687	.67639	1.640	2.209	-.017	-1.60	-4.61	954.
270.00	586.738	.67859	.61162	1.663	2.253	.067	20.71	17.64	910.
280.00	575.445	.63082	.54846	1.689	2.303	.150	43.49	40.36	865.
290.00	563.712	.58378	.48739	1.720	2.358	.232	66.78	63.59	817.
300.00	551.461	.53760	.42872	1.754	2.419	.313	90.66	87.40	769.
310.00	538.595	.49235	.37263	1.792	2.487	.393	115.19	111.85	719.
320.00	524.985	.44801	.31916	1.833	2.563	.473	140.43	137.00	668.
330.00	510.451	.40450	.26832	1.876	2.648	.553	166.48	162.95	615.
340.00	494.728	.36163	.22001	1.922	2.748	.634	193.44	189.80	561.
350.00	477.403	.31906	.17409	1.971	2.869	.715	221.50	217.73	503.
360.00	457.753	.27618	.13028	2.024	3.029	.798	250.95	247.02	442.
367.94	439.578	.24115	.096736	2.070	3.214	.866	275.69	271.59	388.
367.94	50.125	.010416	.020643	2.007	2.777	1.473	498.93	463.02	169.
370.00	49.130	.010083	.021751	2.008	2.724	1.488	504.60	467.96	172.
380.00	45.217	.88317-2	.026466	2.020	2.568	1.558	530.95	491.14	183.
390.00	42.271	.79594-2	.030446	2.042	2.497	1.624	556.23	513.65	193.
400.00	39.904	.73040-2	.033958	2.071	2.466	1.687	581.02	535.91	201.
410.00	37.924	.67872-2	.037146	2.104	2.457	1.748	605.62	558.15	208.
420.00	36.222	.63654-2	.040096	2.139	2.462	1.807	630.20	580.51	215.
430.00	34.730	.60118-2	.042862	2.175	2.476	1.865	654.89	603.06	221.
440.00	33.404	.57094-2	.045485	2.213	2.495	1.922	679.74	625.85	226.
450.00	32.211	.54463-2	.047990	2.251	2.519	1.978	704.81	648.92	232.
460.00	31.128	.52143-2	.050398	2.289	2.545	2.034	730.13	672.30	237.
470.00	30.137	.50074-2	.052725	2.328	2.574	2.089	755.72	695.99	241.
480.00	29.224	.48212-2	.054982	2.366	2.604	2.144	781.60	720.01	246.
490.00	28.380	.46522-2	.057180	2.404	2.634	2.198	807.79	744.37	250.
500.00	27.594	.44978-2	.059325	2.442	2.666	2.251	834.30	769.07	254.
510.00	26.861	.43558-2	.061425	2.480	2.698	2.304	861.12	794.10	259.
520.00	26.174	.42247-2	.063483	2.517	2.730	2.357	888.26	819.49	262.
530.00	25.529	.41029-2	.065506	2.553	2.762	2.409	915.72	845.21	266.
540.00	24.920	.39895-2	.067495	2.590	2.795	2.461	943.51	871.28	270.
550.00	24.345	.38834-2	.069454	2.625	2.827	2.513	971.61	897.68	273.
560.00	23.801	.37838-2	.071387	2.661	2.859	2.564	1000.04	924.42	277.
570.00	23.285	.36902-2	.073295	2.695	2.891	2.615	1028.79	951.49	280.
580.00	22.793	.36018-2	.075180	2.730	2.922	2.665	1057.86	978.89	284.
590.00	22.326	.35183-2	.077044	2.763	2.953	2.716	1087.24	1006.61	287.
600.00	21.880	.34392-2	.078888	2.796	2.984	2.766	1116.93	1034.66	290.
610.00	21.453	.33640-2	.080715	2.829	3.015	2.815	1146.92	1063.02	293.
620.00	21.046	.32926-2	.082525	2.861	3.045	2.864	1177.22	1091.70	296.
630.00	20.655	.32245-2	.084319	2.893	3.075	2.913	1207.83	1120.68	299.
640.00	20.280	.31596-2	.086099	2.924	3.105	2.962	1238.73	1149.97	302.
650.00	19.921	.30975-2	.087865	2.955	3.134	3.010	1269.92	1179.56	305.
660.00	19.575	.30382-2	.089618	2.985	3.163	3.058	1301.40	1209.45	308.
670.00	19.242	.29813-2	.091360	3.015	3.191	3.106	1333.17	1239.63	311.
680.00	18.922	.29268-2	.093090	3.044	3.219	3.154	1365.22	1270.09	314.
690.00	18.613	.28744-2	.094809	3.073	3.247	3.201	1397.55	1300.84	316.
700.00	18.315	.28241-2	.096518	3.102	3.274	3.248	1430.15	1331.88	319.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

2.00 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV - - KJ/KG /DEG K) - -	CP	S*	H* - - KJ/KG	U - -	VEL SND M/SEC
250.00	608.516	.77893	.74718	1.618	2.166	-.103	-23.29	-26.58	1000.
260.00	597.949	.73022	.68132	1.639	2.208	-.018	-1.42	-4.76	958.
270.00	587.064	.68178	.61638	1.661	2.252	.066	20.88	17.47	914.
280.00	575.808	.63389	.55310	1.688	2.301	.149	43.64	40.17	868.
290.00	564.120	.58678	.49195	1.718	2.356	.231	66.92	63.38	821.
300.00	551.925	.54058	.43323	1.753	2.417	.312	90.78	87.16	773.
310.00	539.129	.49534	.37712	1.790	2.484	.392	115.28	111.57	723.
320.00	525.607	.45107	.32367	1.831	2.559	.472	140.49	136.68	673.
330.00	511.190	.40767	.27288	1.874	2.643	.552	166.49	162.58	620.
340.00	495.628	.36499	.22466	1.920	2.740	.633	193.39	189.36	566.
350.00	478.536	.32271	.17888	1.968	2.858	.714	221.36	217.18	510.
360.00	459.259	.28029	.13531	2.020	3.011	.796	250.67	246.31	449.
370.00	436.493	.23666	.093548	2.078	3.240	.881	281.83	277.25	382.
373.54	427.229	.22078	.079336	2.100	3.357	.913	293.44	288.76	356.
373.54	57.109	.012200	.018569	2.050	2.968	1.476	503.84	468.82	164.
380.00	53.443	.010971	.022206	2.050	2.771	1.525	522.31	484.89	173.
390.00	49.251	.96521-2	.026891	2.063	2.620	1.595	549.17	508.56	185.
400.00	46.075	.87212-2	.030879	2.086	2.551	1.660	574.98	531.57	194.
410.00	43.514	.80164-2	.034417	2.115	2.520	1.723	600.31	554.34	202.
420.00	41.368	.74576-2	.037639	2.148	2.510	1.783	625.44	577.10	210.
430.00	39.522	.69996-2	.040626	2.182	2.514	1.842	650.56	599.95	216.
440.00	37.903	.66145-2	.043432	2.219	2.527	1.900	675.76	622.99	222.
450.00	36.463	.62843-2	.046095	2.256	2.546	1.957	701.12	646.27	228.
460.00	35.167	.59965-2	.048640	2.293	2.568	2.013	726.68	669.81	233.
470.00	33.990	.57424-2	.051087	2.331	2.594	2.069	752.49	693.65	238.
480.00	32.913	.55156-2	.053453	2.369	2.621	2.124	778.56	717.80	243.
490.00	31.922	.53112-2	.055748	2.407	2.650	2.178	804.92	742.27	248.
500.00	31.004	.51255-2	.057982	2.444	2.680	2.232	831.57	767.06	252.
510.00	30.151	.49558-2	.060163	2.482	2.711	2.285	858.52	792.19	256.
520.00	29.355	.47998-2	.062297	2.519	2.742	2.338	885.78	817.65	260.
530.00	28.608	.46555-2	.064389	2.555	2.773	2.391	913.36	843.45	264.
540.00	27.907	.45216-2	.066443	2.591	2.804	2.443	941.24	869.58	268.
550.00	27.246	.43968-2	.068464	2.627	2.836	2.495	969.45	896.04	272.
560.00	26.621	.42800-2	.070453	2.662	2.867	2.546	997.96	922.83	275.
570.00	26.030	.41705-2	.072415	2.696	2.898	2.597	1026.79	949.95	279.
580.00	25.469	.40674-2	.074351	2.731	2.930	2.648	1055.93	977.40	282.
590.00	24.935	.39702-2	.076264	2.764	2.960	2.698	1085.38	1005.17	286.
600.00	24.427	.38782-2	.078155	2.797	2.991	2.748	1115.14	1033.26	289.
610.00	23.942	.37911-2	.080025	2.830	3.021	2.798	1145.20	1061.66	292.
620.00	23.479	.37084-2	.081877	2.862	3.051	2.847	1175.56	1090.37	295.
630.00	23.035	.36298-2	.083711	2.894	3.081	2.896	1206.21	1119.39	299.
640.00	22.611	.35549-2	.085529	2.925	3.110	2.945	1237.17	1148.71	302.
650.00	22.204	.34834-2	.087332	2.956	3.139	2.993	1268.41	1178.33	305.
660.00	21.813	.34151-2	.089121	2.986	3.167	3.042	1299.94	1208.25	307.
670.00	21.437	.33498-2	.090896	3.015	3.195	3.089	1331.75	1238.46	310.
680.00	21.075	.32872-2	.092658	3.045	3.223	3.137	1363.85	1268.95	313.
690.00	20.727	.32272-2	.094409	3.074	3.251	3.184	1396.22	1299.73	316.
700.00	20.392	.31696-2	.096149	3.102	3.278	3.231	1428.86	1330.78	319.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

2.50 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV - - KJ/KG	CP /DEG K) - -	S*	H* - - KJ/KG	U - -	VEL SND M/SEC
250.00	609.180	.78780	.75994	1.614	2.164	-.105	-22.82	-26.92	1009.
260.00	598.676	.73850	.69355	1.635	2.205	-.019	-.97	-5.15	967.
270.00	587.867	.68963	.62821	1.658	2.249	.065	21.30	17.04	923.
280.00	576.703	.64145	.56462	1.684	2.298	.148	44.03	39.69	878.
290.00	565.125	.59417	.50326	1.715	2.352	.229	67.27	62.84	831.
300.00	553.064	.54789	.44441	1.749	2.411	.310	91.08	86.56	783.
310.00	540.436	.50269	.38824	1.786	2.477	.390	115.51	110.89	734.
320.00	527.126	.45855	.33481	1.827	2.550	.470	140.64	135.90	684.
330.00	512.985	.41542	.28412	1.869	2.631	.549	166.54	161.66	632.
340.00	497.798	.37315	.23610	1.914	2.723	.629	193.30	188.27	580.
350.00	481.243	.33151	.19064	1.962	2.833	.710	221.06	215.87	525.
360.00	462.795	.29009	.14757	2.012	2.970	.791	250.04	244.64	467.
370.00	441.493	.24814	.10664	2.066	3.162	.875	280.64	274.98	404.
380.00	415.177	.20405	.67341	2.128	3.491	.963	313.72	307.70	332.
385.90	394.941	.17531	.44414	2.173	3.885	1.020	335.35	329.02	282.
385.90	77.188	.017622	.013305	2.149	3.660	1.478	512.05	479.66	151.
390.00	72.547	.016016	.016390	2.138	3.298	1.514	526.24	491.78	159.
400.00	64.944	.013503	.022339	2.137	2.911	1.592	556.95	518.46	174.
410.00	59.812	.011916	.027102	2.152	2.752	1.662	585.17	543.37	186.
420.00	55.922	.010786	.031196	2.175	2.676	1.727	612.26	567.56	196.
430.00	52.789	.99235-2	.034850	2.204	2.640	1.790	638.81	591.46	204.
440.00	50.168	.92366-2	.038190	2.235	2.626	1.850	665.13	615.30	212.
450.00	47.916	.86715-2	.041294	2.269	2.626	1.909	691.38	639.20	219.
460.00	45.944	.81950-2	.044215	2.304	2.635	1.967	717.68	663.27	225.
470.00	44.192	.77855-2	.046988	2.340	2.651	2.024	744.11	687.54	231.
480.00	42.618	.74282-2	.049640	2.377	2.671	2.080	770.71	712.05	236.
490.00	41.190	.71124-2	.052191	2.413	2.693	2.135	797.53	736.84	241.
500.00	39.886	.68302-2	.054655	2.450	2.718	2.190	824.59	761.91	246.
510.00	38.686	.65759-2	.057046	2.487	2.745	2.244	851.90	787.28	251.
520.00	37.576	.63449-2	.059372	2.523	2.773	2.297	879.49	812.96	255.
530.00	36.545	.61337-2	.061642	2.559	2.801	2.350	907.36	838.95	260.
540.00	35.583	.59394-2	.063861	2.595	2.830	2.403	935.51	865.26	264.
550.00	34.682	.57600-2	.066035	2.630	2.860	2.455	963.96	891.88	268.
560.00	33.836	.55934-2	.068169	2.665	2.889	2.507	992.71	918.82	272.
570.00	33.040	.54381-2	.070266	2.699	2.919	2.558	1021.75	946.08	276.
580.00	32.287	.52930-2	.072329	2.733	2.948	2.609	1051.08	973.65	279.
590.00	31.575	.51568-2	.074363	2.766	2.978	2.660	1080.71	1001.54	283.
600.00	30.899	.50288-2	.076368	2.799	3.007	2.710	1110.64	1029.73	286.
610.00	30.257	.49080-2	.078347	2.832	3.037	2.760	1140.86	1058.23	290.
620.00	29.645	.47939-2	.080303	2.864	3.066	2.810	1171.37	1087.04	293.
630.00	29.062	.46858-2	.082236	2.895	3.094	2.859	1202.17	1116.15	296.
640.00	28.505	.45832-2	.084149	2.926	3.123	2.908	1233.26	1145.56	300.
650.00	27.972	.44857-2	.086043	2.957	3.151	2.957	1264.63	1175.26	303.
660.00	27.462	.43928-2	.087918	2.987	3.179	3.005	1296.28	1205.25	306.
670.00	26.972	.43042-2	.089777	3.017	3.207	3.053	1328.21	1235.52	309.
680.00	26.502	.42196-2	.091619	3.046	3.234	3.101	1360.42	1266.09	312.
690.00	26.051	.41387-2	.093447	3.075	3.261	3.148	1392.89	1296.93	315.
700.00	25.616	.40612-2	.095261	3.103	3.288	3.195	1425.64	1328.04	318.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

3.00 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV - - KJ/KG /DEG K) - -	CP	S*	H* - - KJ/KG	U - -	VEL SND M/SEC
250.00	609.832	.79651	.77259	1.610	2.162	-.106	-22.35	-27.27	1019.
260.00	599.391	.74663	.70566	1.631	2.203	-.021	-.52	-5.53	976.
270.00	588.656	.69733	.63991	1.654	2.246	.063	21.72	16.62	932.
280.00	577.579	.64886	.57602	1.681	2.294	.146	44.42	39.22	887.
290.00	566.107	.60139	.51445	1.711	2.347	.227	67.62	62.32	840.
300.00	554.176	.55503	.45546	1.745	2.406	.308	91.38	85.97	792.
310.00	541.705	.50984	.39922	1.782	2.470	.388	115.75	110.22	744.
320.00	528.596	.46582	.34579	1.823	2.541	.467	140.81	135.13	694.
330.00	514.712	.42291	.29518	1.865	2.620	.547	166.60	160.78	644.
340.00	499.867	.38100	.24731	1.909	2.708	.626	193.23	187.23	592.
350.00	483.790	.33991	.20211	1.956	2.811	.706	220.81	214.61	539.
360.00	466.053	.29930	.15944	2.004	2.936	.787	249.52	243.08	483.
370.00	445.925	.25866	.11914	2.056	3.101	.869	279.66	272.93	424.
380.00	421.935	.21697	.080910	2.114	3.356	.955	311.83	304.72	358.
390.00	390.176	.17162	.044169	2.183	3.892	1.048	347.63	339.94	281.
396.49	358.002	.13562	.020078	2.248	5.082	1.120	375.79	367.41	213.
396.49	103.609	.025274	.79198-2	2.244	5.223	1.468	513.71	484.75	136.
400.00	94.998	.022295	.011510	2.222	4.136	1.508	529.81	498.23	146.
410.00	81.754	.017840	.018761	2.203	3.244	1.597	565.66	528.96	166.
420.00	74.034	.015387	.024206	2.211	2.960	1.671	596.48	555.95	180.
430.00	68.543	.013737	.028768	2.230	2.830	1.739	625.35	581.59	191.
440.00	64.280	.012522	.032779	2.256	2.765	1.803	653.29	606.62	200.
450.00	60.800	.011575	.036411	2.285	2.733	1.865	680.76	631.42	209.
460.00	57.863	.010809	.039762	2.317	2.721	1.925	708.02	656.17	216.
470.00	55.325	.010171	.042898	2.351	2.721	1.983	735.22	681.00	223.
480.00	53.095	.96291-2	.045862	2.385	2.730	2.041	762.47	705.97	229.
490.00	51.109	.91600-2	.048685	2.421	2.744	2.097	789.83	731.13	235.
500.00	49.319	.87484-2	.051392	2.456	2.762	2.153	817.36	756.53	240.
510.00	47.694	.83831-2	.054000	2.492	2.784	2.208	845.09	782.19	246.
520.00	46.207	.80556-2	.056524	2.527	2.807	2.262	873.04	808.11	251.
530.00	44.838	.77595-2	.058974	2.563	2.832	2.316	901.23	834.32	255.
540.00	43.571	.74900-2	.061360	2.598	2.858	2.369	929.68	860.83	260.
550.00	42.393	.72431-2	.063688	2.633	2.885	2.421	958.40	887.63	264.
560.00	41.293	.70158-2	.065966	2.667	2.912	2.474	987.38	914.73	268.
570.00	40.263	.68054-2	.068198	2.701	2.940	2.525	1016.65	942.14	272.
580.00	39.295	.66100-2	.070388	2.735	2.968	2.577	1046.19	969.84	276.
590.00	38.383	.64277-2	.072541	2.768	2.996	2.628	1076.01	997.85	280.
600.00	37.521	.62571-2	.074659	2.801	3.025	2.678	1106.12	1026.16	284.
610.00	36.705	.60970-2	.076746	2.834	3.053	2.729	1136.51	1054.77	288.
620.00	35.931	.59464-2	.078803	2.865	3.081	2.779	1167.17	1083.68	291.
630.00	35.195	.58042-2	.080833	2.897	3.109	2.828	1198.12	1112.88	295.
640.00	34.494	.56699-2	.082839	2.928	3.136	2.877	1229.35	1142.38	298.
650.00	33.825	.55426-2	.084821	2.958	3.164	2.926	1260.85	1172.16	301.
660.00	33.186	.54217-2	.086781	2.988	3.191	2.975	1292.63	1202.23	304.
670.00	32.575	.53068-2	.088721	3.018	3.218	3.023	1324.68	1232.58	308.
680.00	31.989	.51973-2	.090642	3.047	3.245	3.071	1356.99	1263.21	311.
690.00	31.428	.50929-2	.092545	3.076	3.272	3.118	1389.58	1294.12	314.
700.00	30.888	.49932-2	.094432	3.104	3.298	3.165	1422.42	1325.30	317.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND M/SEC
				- - KJ/KG /DEG K) - -			- - KJ/KG - -		
250.00	610.474	.80506	.78513	1.607	2.160	-.108	-21.87	-27.60	1028.
260.00	600.093	.75460	.71767	1.628	2.200	-.022	-.07	-5.90	985.
270.00	589.430	.70488	.65151	1.651	2.243	.062	22.15	16.21	941.
280.00	578.439	.65612	.58732	1.677	2.291	.144	44.81	38.76	896.
290.00	567.069	.60846	.52552	1.708	2.343	.225	67.98	61.80	849.
300.00	555.261	.56202	.46638	1.742	2.401	.306	91.69	85.39	802.
310.00	542.941	.51682	.41007	1.779	2.464	.386	116.01	109.56	754.
320.00	530.019	.47289	.35663	1.819	2.533	.465	140.99	134.38	705.
330.00	516.375	.43017	.30606	1.861	2.609	.544	166.69	159.92	655.
340.00	501.845	.38857	.25832	1.905	2.694	.623	193.20	186.23	604.
350.00	486.197	.34794	.21333	1.950	2.791	.703	220.61	213.41	552.
360.00	469.081	.30802	.17098	1.998	2.906	.783	249.07	241.61	499.
370.00	449.922	.26843	.13115	2.048	3.052	.864	278.83	271.05	442.
380.00	427.669	.22848	.093681	2.102	3.260	.948	310.32	302.13	381.
390.00	399.972	.18674	.058334	2.164	3.621	1.037	344.51	335.76	312.
400.00	358.817	.13872	.024504	2.245	4.685	1.139	384.73	374.98	226.
410.00	119.784	.029408	.83858-2	2.290	5.237	1.508	534.52	505.30	138.
420.00	98.836	.022382	.016462	2.260	3.569	1.608	576.03	540.62	161.
430.00	88.192	.018959	.022338	2.263	3.153	1.687	609.31	569.63	176.
440.00	80.991	.016754	.027209	2.280	2.972	1.757	639.83	596.62	188.
450.00	75.556	.015167	.031470	2.303	2.880	1.822	669.04	622.72	198.
460.00	71.199	.013950	.035313	2.331	2.831	1.885	697.57	648.41	207.
470.00	67.570	.012976	.038848	2.362	2.808	1.946	725.75	673.95	215.
480.00	64.466	.012172	.042147	2.395	2.801	2.005	753.78	699.49	222.
490.00	61.760	.011493	.045259	2.428	2.803	2.063	781.79	725.12	229.
500.00	59.364	.010909	.048218	2.462	2.813	2.119	809.87	750.91	235.
510.00	57.218	.010399	.051050	2.497	2.827	2.175	838.06	776.89	240.
520.00	55.277	.99487-2	.053774	2.532	2.845	2.230	866.42	803.10	246.
530.00	53.508	.95462-2	.056407	2.567	2.866	2.285	894.98	829.56	251.
540.00	51.884	.91836-2	.058959	2.601	2.888	2.338	923.75	856.29	256.
550.00	50.386	.88544-2	.061442	2.636	2.912	2.392	952.75	883.28	261.
560.00	48.997	.85537-2	.063862	2.670	2.937	2.444	982.00	910.56	265.
570.00	47.704	.82775-2	.066227	2.704	2.963	2.496	1011.50	938.13	269.
580.00	46.494	.80224-2	.068541	2.737	2.989	2.548	1041.26	965.98	274.
590.00	45.360	.77859-2	.070811	2.770	3.016	2.600	1071.28	994.12	278.
600.00	44.293	.75658-2	.073040	2.803	3.043	2.650	1101.58	1022.56	282.
610.00	43.286	.73602-2	.075231	2.835	3.070	2.701	1132.14	1051.28	285.
620.00	42.334	.71675-2	.077388	2.867	3.097	2.751	1162.97	1080.29	289.
630.00	41.432	.69864-2	.079512	2.898	3.123	2.801	1194.07	1109.59	293.
640.00	40.576	.68159-2	.081608	2.929	3.150	2.850	1225.44	1139.18	296.
650.00	39.761	.66548-2	.083676	2.959	3.177	2.899	1257.07	1169.05	300.
660.00	38.984	.65025-2	.085719	2.989	3.204	2.948	1288.98	1199.20	303.
670.00	38.243	.63580-2	.087738	3.019	3.230	2.996	1321.15	1229.62	306.
680.00	37.534	.62207-2	.089735	3.048	3.256	3.044	1353.58	1260.33	310.
690.00	36.855	.60901-2	.091710	3.077	3.282	3.092	1386.27	1291.30	313.
700.00	36.205	.59657-2	.093667	3.105	3.308	3.140	1419.22	1322.55	316.

H* = H(T) - H(N.B.T,LIQUID)   AND
S* = S(T) - S(N.B.T,LIQUID)

4.00 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV - - KJ/KG /DEG K) - -	CP	S*	H* - - KJ/KG - -	U	VEL SND M/SEC
250.00	611.106	.81347	.79755	1.603	2.158	-.109	-21.40	-27.94	1036.
260.00	600.784	.76244	.72957	1.624	2.198	-.024	.39	-6.27	994.
270.00	590.191	.71230	.66301	1.647	2.241	.060	22.58	15.80	950.
280.00	579.282	.66324	.59851	1.674	2.287	.143	45.21	38.31	904.
290.00	568.011	.61539	.53648	1.704	2.339	.224	68.34	61.30	858.
300.00	556.320	.56884	.47719	1.739	2.396	.304	92.01	84.82	811.
310.00	544.145	.52364	.42079	1.776	2.458	.383	116.27	108.92	763.
320.00	531.401	.47978	.36732	1.815	2.525	.463	141.18	133.66	715.
330.00	517.981	.43722	.31678	1.857	2.599	.541	166.80	159.08	666.
340.00	503.741	.39589	.26914	1.901	2.681	.620	193.19	185.25	616.
350.00	488.483	.35565	.22431	1.946	2.773	.699	220.45	212.26	565.
360.00	471.912	.31631	.18222	1.992	2.880	.779	248.70	240.22	513.
370.00	453.574	.27757	.14276	2.041	3.012	.859	278.13	269.31	459.
380.00	432.684	.23896	.10585	2.092	3.187	.942	309.07	299.83	402.
390.00	407.698	.19961	.071392	2.149	3.458	1.028	342.18	332.37	339.
400.00	374.685	.15752	.039316	2.215	4.013	1.121	379.12	368.44	267.
410.00	314.238	.10430	.97819-2	2.317	6.935	1.242	428.19	415.46	171.
420.00	141.700	.035647	.78176-2	2.335	5.735	1.522	544.16	515.93	139.
430.00	114.801	.026689	.015616	2.306	3.794	1.628	588.96	554.12	160.
440.00	101.591	.022418	.021555	2.309	3.303	1.708	624.06	584.68	176.
450.00	92.839	.019706	.026541	2.324	3.088	1.780	655.89	612.80	188.
460.00	86.322	.017772	.030925	2.347	2.978	1.846	686.16	639.82	198.
470.00	81.149	.016297	.034888	2.374	2.918	1.910	715.61	666.31	207.
480.00	76.872	.015123	.038540	2.404	2.886	1.971	744.61	692.57	215.
490.00	73.235	.014158	.041949	2.436	2.873	2.030	773.39	718.77	222.
500.00	70.079	.013346	.045165	2.469	2.871	2.088	802.10	745.02	229.
510.00	67.296	.012649	.048222	2.503	2.876	2.145	830.83	771.39	235.
520.00	64.812	.012043	.051148	2.537	2.888	2.201	859.64	797.93	241.
530.00	62.572	.011508	.053962	2.571	2.903	2.256	888.59	824.67	247.
540.00	60.535	.011031	.056679	2.605	2.921	2.311	917.71	851.63	252.
550.00	58.670	.010602	.059313	2.639	2.942	2.364	947.02	878.85	257.
560.00	56.953	.010214	.061872	2.673	2.964	2.418	976.55	906.32	262.
570.00	55.363	.98594-2	.064367	2.706	2.987	2.470	1006.30	934.05	267.
580.00	53.884	.95344-2	.066803	2.739	3.011	2.522	1036.30	962.06	271.
590.00	52.504	.92348-2	.069186	2.772	3.036	2.574	1066.53	990.35	275.
600.00	51.211	.89574-2	.071522	2.805	3.061	2.625	1097.02	1018.91	279.
610.00	49.997	.86995-2	.073814	2.837	3.087	2.676	1127.76	1047.75	283.
620.00	48.852	.84589-2	.076066	2.868	3.113	2.727	1158.76	1076.88	287.
630.00	47.770	.82336-2	.078282	2.900	3.139	2.777	1190.01	1106.28	291.
640.00	46.746	.80222-2	.080465	2.930	3.165	2.826	1221.53	1135.96	295.
650.00	45.775	.78233-2	.082616	2.961	3.190	2.875	1253.30	1165.92	298.
660.00	44.851	.76356-2	.084738	2.990	3.216	2.924	1285.34	1196.15	302.
670.00	43.971	.74581-2	.086833	3.020	3.242	2.973	1317.63	1226.66	305.
680.00	43.132	.72900-2	.088903	3.049	3.267	3.021	1350.17	1257.44	309.
690.00	42.330	.71304-2	.090949	3.078	3.293	3.069	1382.98	1288.48	312.
700.00	41.563	.69787-2	.092972	3.106	3.318	3.117	1416.03	1319.79	315.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

4.50 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND
				- - KJ/KG /DEG K) - -			- - KJ/KG	- -	M/SEC
250.00	611.728	.82172	.80987	1.599	2.156	-.110	-20.92	-28.27	1045.
260.00	601.464	.77013	.74137	1.621	2.196	-.025	.84	-6.64	1002.
270.00	590.939	.71958	.67440	1.644	2.238	.059	23.01	15.39	958.
280.00	580.110	.67022	.60959	1.671	2.284	.141	45.61	37.86	913.
290.00	568.933	.62218	.54734	1.701	2.335	.222	68.70	60.80	867.
300.00	557.357	.57553	.48789	1.735	2.391	.302	92.33	84.26	820.
310.00	545.318	.53030	.43138	1.772	2.452	.381	116.54	108.29	773.
320.00	532.743	.48649	.37787	1.812	2.518	.460	141.39	132.94	725.
330.00	519.533	.44407	.32735	1.854	2.590	.539	166.93	158.26	676.
340.00	505.563	.40296	.27978	1.897	2.669	.617	193.21	184.31	627.
350.00	490.660	.36307	.23509	1.941	2.756	.696	220.33	211.16	578.
360.00	474.577	.32422	.19320	1.987	2.857	.775	248.38	238.90	527.
370.00	456.944	.28619	.15404	2.035	2.977	.855	277.53	267.68	475.
380.00	437.163	.24864	.11755	2.084	3.130	.936	308.03	297.74	420.
390.00	414.155	.21100	.083693	2.137	3.347	1.020	340.34	329.47	362.
400.00	385.622	.17223	.052560	2.196	3.714	1.109	375.45	363.78	298.
410.00	344.882	.12970	.024628	2.269	4.623	1.210	416.26	403.21	224.
420.00	253.335	.073841	.47040-2	2.378	9.963	1.365	481.04	463.28	140.
430.00	156.224	.039665	.93037-2	2.359	5.338	1.553	560.51	531.70	145.
440.00	128.388	.030377	.016110	2.342	3.871	1.655	604.91	569.86	163.
450.00	113.618	.025580	.021795	2.348	3.394	1.736	640.90	601.29	178.
460.00	103.716	.022482	.026715	2.365	3.174	1.808	673.61	630.23	189.
470.00	96.328	.020259	.031103	2.388	3.056	1.875	704.70	657.99	200.
480.00	90.467	.018561	.035103	2.415	2.990	1.938	734.90	685.16	208.
490.00	85.630	.017208	.038806	2.444	2.954	1.999	764.61	712.06	217.
500.00	81.524	.016096	.042274	2.476	2.937	2.059	794.05	738.85	224.
510.00	77.966	.015159	.045553	2.508	2.931	2.117	823.38	765.67	231.
520.00	74.834	.014357	.048674	2.541	2.934	2.174	852.71	792.57	237.
530.00	72.043	.013658	.051664	2.575	2.943	2.230	882.09	819.63	243.
540.00	69.529	.013043	.054541	2.608	2.957	2.285	911.59	846.87	249.
550.00	67.247	.012495	.057320	2.642	2.973	2.339	941.23	874.32	254.
560.00	65.159	.012002	.060014	2.675	2.992	2.393	971.06	902.00	259.
570.00	63.239	.011556	.062633	2.708	3.012	2.446	1001.08	929.92	264.
580.00	61.462	.011150	.065185	2.741	3.034	2.499	1031.31	958.09	269.
590.00	59.812	.010777	.067678	2.774	3.057	2.551	1061.76	986.53	273.
600.00	58.273	.010434	.070116	2.806	3.081	2.602	1092.45	1015.23	277.
610.00	56.832	.010117	.072505	2.838	3.105	2.654	1123.38	1044.20	282.
620.00	55.479	.98219-2	.074849	2.870	3.129	2.704	1154.55	1073.44	286.
630.00	54.205	.95469-2	.077152	2.901	3.154	2.755	1185.97	1102.95	290.
640.00	53.002	.92897-2	.079417	2.931	3.179	2.804	1217.63	1132.73	293.
650.00	51.863	.90484-2	.081647	2.962	3.204	2.854	1249.55	1162.78	297.
660.00	50.783	.88214-2	.083845	2.991	3.229	2.903	1281.71	1193.10	301.
670.00	49.757	.86075-2	.086013	3.021	3.254	2.952	1314.13	1223.69	304.
680.00	48.781	.84053-2	.088152	3.050	3.279	3.000	1346.79	1254.54	308.
690.00	47.849	.82139-2	.090265	3.078	3.304	3.048	1379.70	1285.66	311.
700.00	46.960	.80323-2	.092353	3.107	3.328	3.096	1412.86	1317.04	315.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

5.00 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV - - KJ/KG	CP /DEG K)	S* - -	H* - - KJ/KG	U - -	VEL SND M/SEC
250.00	612.341	.82984	.82209	1.596	2.155	-.112	-20.44	-28.60	1053.
260.00	602.133	.77770	.75307	1.618	2.194	-.026	1.30	-7.00	1011.
270.00	591.674	.72673	.68570	1.641	2.235	.057	23.44	14.99	966.
280.00	580.923	.67708	.62058	1.668	2.281	.139	46.02	37.41	921.
290.00	569.838	.62884	.55809	1.699	2.331	.220	69.08	60.30	875.
300.00	558.370	.58207	.49848	1.733	2.387	.300	92.66	83.71	829.
310.00	546.463	.53680	.44187	1.770	2.447	.379	116.82	107.67	782.
320.00	534.048	.49303	.38830	1.809	2.511	.458	141.61	132.25	734.
330.00	521.037	.45073	.33778	1.850	2.581	.536	167.07	157.47	686.
340.00	507.317	.40982	.29026	1.893	2.658	.615	193.26	183.40	638.
350.00	492.740	.37023	.24567	1.937	2.742	.693	220.24	210.10	590.
360.00	477.095	.33180	.20395	1.983	2.836	.771	248.12	237.64	540.
370.00	460.079	.29437	.16502	2.029	2.947	.850	277.02	266.15	490.
380.00	441.224	.25767	.12885	2.077	3.083	.931	307.14	295.81	437.
390.00	419.744	.22133	.095429	2.128	3.264	1.013	338.83	326.92	383.
400.00	394.160	.18474	.064880	2.182	3.537	1.099	372.72	360.04	324.
410.00	361.129	.14675	.037639	2.244	4.043	1.192	410.30	396.46	260.
420.00	310.540	.10494	.015541	2.320	5.406	1.302	456.22	440.12	190.
430.00	222.547	.062255	.71367-2	2.387	7.102	1.459	522.69	500.23	146.
440.00	164.940	.042011	.011802	2.376	4.795	1.593	581.29	550.97	154.
450.00	139.179	.033325	.017622	2.373	3.837	1.689	623.68	587.75	169.
460.00	123.950	.028342	.022895	2.383	3.433	1.768	659.78	619.44	182.
470.00	113.394	.025008	.027627	2.401	3.229	1.839	692.98	648.89	193.
480.00	105.408	.022575	.031930	2.425	3.115	1.906	724.65	677.21	203.
490.00	99.031	.020700	.035898	2.453	3.049	1.970	755.44	704.95	211.
500.00	93.748	.019197	.039598	2.482	3.012	2.031	785.73	732.39	219.
510.00	89.256	.017957	.043081	2.514	2.993	2.090	815.74	759.72	226.
520.00	85.360	.016911	.046386	2.546	2.986	2.148	845.62	787.05	233.
530.00	81.929	.016013	.049540	2.578	2.987	2.205	875.48	814.45	240.
540.00	78.869	.015230	.052567	2.611	2.995	2.261	905.39	841.99	246.
550.00	76.115	.014540	.055483	2.645	3.006	2.316	935.39	869.70	251.
560.00	73.613	.013925	.058304	2.678	3.021	2.370	965.52	897.60	256.
570.00	71.326	.013372	.061041	2.711	3.039	2.424	995.82	925.72	262.
580.00	69.223	.012872	.063703	2.743	3.058	2.477	1026.31	954.08	266.
590.00	67.278	.012416	.066298	2.776	3.079	2.529	1056.99	982.67	271.
600.00	65.471	.011998	.068833	2.808	3.101	2.581	1087.89	1011.52	276.
610.00	63.786	.011614	.071313	2.840	3.123	2.633	1119.00	1040.62	280.
620.00	62.210	.011258	.073744	2.871	3.146	2.684	1150.35	1069.98	284.
630.00	60.730	.010927	.076129	2.902	3.170	2.734	1181.93	1099.60	288.
640.00	59.336	.010619	.078473	2.932	3.194	2.784	1213.75	1129.48	292.
650.00	58.021	.010331	.080778	2.963	3.218	2.834	1245.81	1159.63	296.
660.00	56.776	.010060	.083047	2.992	3.242	2.883	1278.10	1190.04	300.
670.00	55.596	.98062-2	.085283	3.022	3.266	2.932	1310.65	1220.71	304.
680.00	54.475	.95666-2	.087489	3.051	3.290	2.981	1343.43	1251.64	307.
690.00	53.407	.93404-2	.089665	3.079	3.315	3.029	1376.45	1282.83	311.
700.00	52.390	.91262-2	.091815	3.107	3.339	3.077	1409.72	1314.28	314.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

T	DENSITY	DP/DT	DP/DD	CV	CP	S*	H*	U	VEL SND
DEG K	KG/M3	MPA/K	MPA/(KG/M3)	- - KJ/KG	/DEG K)	- -	- - KJ/KG	- -	M/SEC
250.00	612.945	.83783	.83421	1.593	2.153	-.113	-19.96	-28.93	1062.
260.00	602.792	.78513	.76467	1.615	2.191	-.028	1.76	-7.36	1019.
270.00	592.397	.73376	.69691	1.638	2.233	.056	23.88	14.60	975.
280.00	581.722	.68381	.63148	1.665	2.278	.138	46.43	36.97	929.
290.00	570.725	.63537	.56875	1.696	2.328	.218	69.45	59.82	884.
300.00	559.363	.58848	.50897	1.730	2.382	.298	93.00	83.17	837.
310.00	547.582	.54317	.45224	1.767	2.441	.377	117.11	107.07	791.
320.00	535.319	.49942	.39862	1.806	2.505	.456	141.84	131.56	744.
330.00	522.495	.45721	.34808	1.847	2.573	.534	167.22	156.70	696.
340.00	509.010	.41648	.30059	1.890	2.647	.612	193.32	182.51	649.
350.00	494.733	.37714	.25608	1.934	2.728	.690	220.19	209.07	601.
360.00	479.485	.33908	.21448	1.978	2.818	.768	247.90	236.43	553.
370.00	463.015	.30215	.17574	2.024	2.921	.846	276.58	264.71	504.
380.00	444.947	.26616	.13982	2.071	3.044	.926	306.38	294.02	453.
390.00	424.694	.23084	.10672	2.120	3.200	1.007	337.57	324.61	401.
400.00	401.242	.19582	.076556	2.171	3.416	1.090	370.57	356.86	347.
410.00	372.636	.16051	.049693	2.227	3.757	1.178	406.28	391.52	290.
420.00	334.509	.12405	.027205	2.289	4.413	1.276	446.73	430.29	229.
430.00	277.496	.086666	.012611	2.358	5.684	1.394	496.83	477.01	174.
440.00	211.078	.058035	.010591	2.392	5.533	1.528	555.28	529.22	157.
450.00	170.420	.043467	.014776	2.394	4.375	1.639	604.41	572.14	164.
460.00	147.488	.035622	.019828	2.400	3.753	1.727	644.69	607.39	176.
470.00	132.577	.030692	.024665	2.415	3.436	1.804	680.47	638.98	187.
480.00	121.812	.027255	.029151	2.436	3.260	1.874	713.87	668.72	198.
490.00	113.500	.024692	.033313	2.461	3.157	1.940	745.91	697.45	207.
500.00	106.783	.022689	.037200	2.489	3.096	2.004	777.15	725.64	215.
510.00	101.179	.021069	.040857	2.519	3.060	2.065	807.91	753.55	223.
520.00	96.391	.019724	.044320	2.550	3.042	2.124	838.41	781.35	230.
530.00	92.226	.018584	.047621	2.582	3.034	2.182	868.78	809.15	237.
540.00	88.549	.017603	.050783	2.615	3.035	2.238	899.12	837.01	243.
550.00	85.266	.016746	.053824	2.647	3.041	2.294	929.50	865.00	249.
560.00	82.307	.015988	.056760	2.680	3.052	2.349	959.96	893.14	254.
570.00	79.617	.015312	.059605	2.713	3.066	2.403	990.56	921.48	260.
580.00	77.157	.014705	.062368	2.745	3.083	2.457	1021.30	950.02	265.
590.00	74.892	.014154	.065058	2.777	3.101	2.509	1052.22	978.78	270.
600.00	72.798	.013652	.067682	2.809	3.121	2.562	1083.33	1007.78	274.
610.00	70.852	.013191	.070247	2.841	3.142	2.613	1114.64	1037.02	279.
620.00	69.037	.012767	.072758	2.872	3.164	2.665	1146.17	1066.50	283.
630.00	67.338	.012375	.075220	2.903	3.186	2.716	1177.92	1096.24	287.
640.00	65.743	.012010	.077637	2.934	3.209	2.766	1209.89	1126.23	291.
650.00	64.241	.011670	.080012	2.964	3.232	2.816	1242.09	1156.47	295.
660.00	62.823	.011352	.082349	2.993	3.255	2.865	1274.52	1186.97	299.
670.00	61.481	.011054	.084649	3.023	3.278	2.914	1307.19	1217.73	303.
680.00	60.209	.010774	.086917	3.051	3.302	2.963	1340.09	1248.74	307.
690.00	59.000	.010510	.089153	3.080	3.326	3.012	1373.23	1280.01	310.
700.00	57.850	.010260	.091360	3.108	3.349	3.060	1406.60	1311.53	314.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

6.00 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV - - KJ/KG /DEG K) - -	CP	S*	H* - - KJ/KG	U - -	VEL SND M/SEC
250.00	613.540	.84568	.84624	1.590	2.151	-.114	-19.48	-29.25	1070.
260.00	603.441	.79245	.77619	1.612	2.189	-.029	2.23	-7.72	1027.
270.00	593.109	.74067	.70802	1.635	2.230	.054	24.32	14.20	983.
280.00	582.507	.69042	.64228	1.662	2.275	.136	46.84	36.54	937.
290.00	571.596	.64178	.57932	1.693	2.324	.217	69.83	59.34	892.
300.00	560.336	.59477	.51936	1.727	2.378	.296	93.34	82.63	846.
310.00	548.675	.54940	.46252	1.764	2.436	.375	117.41	106.47	799.
320.00	536.557	.50567	.40882	1.803	2.499	.454	142.08	130.89	753.
330.00	523.911	.46354	.35825	1.844	2.565	.532	167.39	155.94	706.
340.00	510.646	.42295	.31077	1.887	2.637	.609	193.40	181.65	659.
350.00	496.647	.38384	.26632	1.930	2.715	.687	220.16	208.08	612.
360.00	481.762	.34609	.22483	1.974	2.801	.764	247.73	235.28	565.
370.00	465.778	.30960	.18623	2.020	2.897	.842	276.21	263.33	517.
380.00	448.393	.27420	.15050	2.066	3.010	.921	305.73	292.35	468.
390.00	429.154	.23970	.11764	2.113	3.147	1.001	336.49	322.51	419.
400.00	407.335	.20586	.087743	2.162	3.326	1.083	368.81	354.08	367.
410.00	381.686	.17235	.061103	2.214	3.582	1.168	403.27	387.55	314.
420.00	349.877	.13884	.038434	2.270	3.990	1.259	440.96	423.81	260.
430.00	307.701	.10549	.021542	2.329	4.676	1.360	484.03	464.53	208.
440.00	253.696	.075750	.013687	2.381	5.247	1.476	534.31	510.66	174.
450.00	205.459	.055893	.014215	2.403	4.746	1.589	584.93	555.73	168.
460.00	174.113	.044451	.018013	2.413	4.077	1.686	628.85	594.39	174.
470.00	153.868	.037417	.022495	2.426	3.662	1.769	667.36	628.37	184.
480.00	139.686	.032671	.026936	2.445	3.420	1.843	702.67	659.72	194.
490.00	129.034	.029230	.031165	2.469	3.276	1.912	736.09	689.59	203.
500.00	120.619	.026602	.035159	2.496	3.187	1.977	768.37	718.63	212.
510.00	113.723	.024516	.038936	2.524	3.133	2.040	799.95	747.19	220.
520.00	107.915	.022811	.042522	2.555	3.101	2.100	831.10	775.50	227.
530.00	102.920	.021384	.045941	2.586	3.084	2.159	862.02	803.72	234.
540.00	98.554	.020169	.049215	2.618	3.077	2.217	892.82	831.94	241.
550.00	94.687	.019117	.052363	2.650	3.078	2.273	923.59	860.22	247.
560.00	91.226	.018196	.055400	2.682	3.084	2.329	954.39	888.62	252.
570.00	88.098	.017379	.058340	2.715	3.095	2.383	985.29	917.18	258.
580.00	85.252	.016649	.061193	2.747	3.108	2.437	1016.30	945.92	263.
590.00	82.644	.015992	.063968	2.779	3.124	2.491	1047.46	974.86	268.
600.00	80.242	.015395	.066674	2.811	3.142	2.543	1078.79	1004.02	273.
610.00	78.018	.014850	.069316	2.842	3.161	2.595	1110.30	1033.40	278.
620.00	75.951	.014351	.071901	2.873	3.181	2.647	1142.01	1063.01	282.
630.00	74.021	.013890	.074433	2.904	3.202	2.698	1173.93	1092.87	286.
640.00	72.214	.013463	.076917	2.934	3.224	2.749	1206.06	1122.97	291.
650.00	70.516	.013067	.079356	2.964	3.246	2.799	1238.40	1153.31	295.
660.00	68.917	.012697	.081755	2.994	3.268	2.848	1270.97	1183.91	299.
670.00	67.407	.012351	.084115	3.023	3.291	2.898	1303.76	1214.75	303.
680.00	65.978	.012027	.086440	3.052	3.314	2.947	1336.79	1245.85	306.
690.00	64.622	.011722	.088732	3.081	3.336	2.995	1370.04	1277.19	310.
700.00	63.334	.011434	.090992	3.109	3.359	3.043	1403.52	1308.78	314.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

7.00 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND M/SEC
				- - KJ/KG /DEG K) - -			- - KJ/KG - -		
250.00	614.705	.86102	.87002	1.584	2.148	-.117	-18.51	-29.89	1086.
260.00	604.711	.80672	.79896	1.606	2.185	-.032	3.16	-8.42	1043.
270.00	594.500	.75414	.73000	1.630	2.225	.051	25.21	13.43	798.
280.00	584.038	.70331	.66363	1.657	2.269	.133	47.68	35.69	953.
290.00	573.292	.65425	.60019	1.688	2.317	.213	70.61	58.40	908.
300.00	562.224	.60698	.53987	1.722	2.370	.293	94.04	81.59	862.
310.00	550.791	.56148	.48277	1.759	2.426	.371	118.02	105.31	816.
320.00	538.945	.51775	.42890	1.798	2.487	.449	142.58	129.60	770.
330.00	526.627	.47573	.37825	1.839	2.551	.527	167.77	154.48	724.
340.00	513.764	.43538	.33076	1.881	2.619	.604	193.62	179.99	679.
350.00	500.267	.39663	.28638	1.924	2.692	.681	220.17	206.18	633.
360.00	486.020	.35940	.24501	1.968	2.771	.758	247.49	233.08	587.
370.00	470.872	.32360	.20662	2.012	2.858	.835	275.63	260.76	542.
380.00	454.617	.28913	.17114	2.057	2.955	.913	304.68	289.28	496.
390.00	436.972	.25587	.13858	2.102	3.067	.991	334.77	318.75	450.
400.00	417.529	.22369	.10900	2.148	3.202	1.070	366.09	349.33	403.
410.00	395.686	.19250	.082575	2.196	3.371	1.151	398.92	381.23	356.
420.00	370.541	.16224	.059660	2.244	3.594	1.235	433.69	414.80	309.
430.00	340.819	.13308	.040973	2.294	3.894	1.323	471.06	450.52	264.
440.00	305.378	.10587	.027703	2.344	4.253	1.416	511.79	488.87	224.
450.00	265.854	.082685	.020911	2.387	4.468	1.515	555.65	529.32	198.
460.00	229.004	.065482	.019720	2.417	4.324	1.612	599.89	569.32	188.
470.00	200.083	.053744	.021674	2.438	4.003	1.702	641.55	606.57	189.
480.00	178.720	.045715	.024951	2.459	3.717	1.783	680.09	640.92	194.
490.00	162.733	.040000	.028680	2.481	3.513	1.857	716.18	673.16	202.
500.00	150.352	.035749	.032497	2.506	3.376	1.927	750.58	704.02	209.
510.00	140.434	.032464	.036258	2.533	3.285	1.993	783.85	734.01	217.
520.00	132.256	.029842	.039910	2.562	3.226	2.056	816.38	763.46	224.
530.00	125.355	.027696	.043436	2.592	3.188	2.117	848.44	792.59	231.
540.00	119.420	.025901	.046839	2.623	3.165	2.176	880.19	821.57	238.
550.00	114.236	.024373	.050125	2.655	3.154	2.234	911.78	850.50	244.
560.00	109.651	.023054	.053303	2.686	3.151	2.291	943.30	879.46	250.
570.00	105.554	.021900	.056383	2.718	3.153	2.347	974.81	908.50	256.
580.00	101.859	.020881	.059373	2.750	3.160	2.402	1006.38	937.66	261.
590.00	98.501	.019971	.062283	2.782	3.171	2.456	1038.03	966.97	266.
600.00	95.430	.019154	.065119	2.813	3.184	2.509	1069.81	996.45	271.
- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
610.00	92.606	.018414	.067887	2.844	3.200	2.562	1101.72	1026.13	276.
620.00	89.996	.017740	.070594	2.875	3.216	2.614	1133.80	1056.02	281.
630.00	87.572	.017123	.073244	2.906	3.235	2.666	1166.06	1086.12	286.
640.00	85.314	.016555	.075842	2.936	3.254	2.717	1198.50	1116.45	290.
650.00	83.201	.016030	.078392	2.966	3.274	2.767	1231.14	1147.00	294.
660.00	81.219	.015543	.080898	2.996	3.294	2.818	1263.98	1177.79	298.
670.00	79.354	.015090	.083361	3.025	3.315	2.867	1297.02	1208.81	302.
680.00	77.595	.014667	.085787	3.053	3.337	2.917	1330.28	1240.07	306.
690.00	75.932	.014271	.088175	3.082	3.358	2.965	1363.76	1271.57	310.
700.00	74.356	.013898	.090530	3.110	3.380	3.014	1397.45	1303.31	314.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV - - KJ/KG	CP /DEG K)	S* - -	H* - - KJ/KG	U - -	VEL SND M/SEC
250.00	615.839	.87588	.89345	1.578	2.144	-.120	-17.53	-30.52	1102.
260.00	605.945	.82055	.82140	1.601	2.182	-.035	4.10	-9.11	1058.
270.00	595.850	.76718	.75165	1.625	2.221	.048	26.11	12.68	1013.
280.00	585.522	.71577	.68466	1.653	2.264	.130	48.53	34.86	968.
290.00	574.930	.66629	.62073	1.684	2.311	.210	71.40	57.48	923.
300.00	564.042	.61875	.56004	1.718	2.362	.289	94.76	80.58	878.
310.00	552.821	.57310	.50265	1.755	2.418	.368	118.66	104.19	832.
320.00	541.224	.52932	.44859	1.794	2.476	.445	143.13	128.35	787.
330.00	529.204	.48737	.39782	1.835	2.538	.522	168.20	153.08	742.
340.00	516.701	.44719	.35029	1.876	2.603	.599	193.90	178.42	697.
350.00	503.645	.40872	.30590	1.919	2.673	.676	220.28	204.39	653.
360.00	489.946	.37189	.26460	1.962	2.746	.752	247.37	231.04	609.
370.00	475.493	.33662	.22631	2.006	2.825	.828	275.22	258.39	565.
380.00	460.144	.30283	.19098	2.050	2.911	.905	303.89	286.51	521.
390.00	443.709	.27044	.15858	2.094	3.007	.982	333.48	315.45	477.
400.00	425.941	.23939	.12914	2.138	3.117	1.059	364.09	345.30	434.
410.00	406.510	.20962	.10276	2.183	3.244	1.138	395.87	376.19	391.
420.00	384.980	.18115	.079628	2.228	3.396	1.217	429.05	408.27	348.
430.00	360.828	.15409	.060095	2.274	3.579	1.299	463.89	441.72	308.
440.00	333.592	.12881	.044689	2.319	3.787	1.384	500.71	476.73	270.
450.00	303.429	.10609	.033985	2.363	3.981	1.471	539.60	513.23	239.
460.00	272.068	.086973	.028124	2.401	4.073	1.560	579.99	550.59	218.
470.00	242.690	.072042	.026289	2.433	4.009	1.647	620.52	587.55	208.
480.00	217.719	.060918	.027083	2.461	3.848	1.730	659.84	623.10	206.
490.00	197.558	.052694	.029320	2.486	3.675	1.808	697.44	656.95	208.
500.00	181.448	.046513	.032270	2.512	3.530	1.880	733.44	689.35	213.
510.00	168.432	.041752	.035538	2.539	3.421	1.949	768.17	720.67	219.
520.00	157.726	.037988	.038919	2.568	3.343	2.015	801.96	751.24	225.
530.00	148.750	.034942	.042310	2.597	3.288	2.078	835.10	781.32	231.
540.00	141.094	.032425	.045659	2.627	3.252	2.139	867.79	811.09	238.
550.00	134.464	.030308	.048942	2.658	3.229	2.199	900.19	840.69	244.
560.00	128.648	.028499	.052151	2.690	3.217	2.257	932.41	870.22	250.
570.00	123.489	.026934	.055282	2.721	3.211	2.313	964.54	899.76	255.
580.00	118.870	.025563	.058337	2.752	3.212	2.369	996.66	929.36	261.
590.00	114.699	.024352	.061319	2.784	3.218	2.424	1028.80	959.06	266.
600.00	110.906	.023271	.064232	2.815	3.226	2.478	1061.02	988.89	271.
610.00	107.437	.022299	.067081	2.846	3.238	2.532	1093.34	1018.88	276.
620.00	104.245	.021420	.069870	2.877	3.252	2.585	1125.78	1049.04	281.
630.00	101.294	.020620	.072603	2.907	3.267	2.637	1158.38	1079.40	286.
640.00	98.555	.019888	.075284	2.938	3.284	2.688	1191.13	1109.96	290.
650.00	96.003	.019215	.077916	2.967	3.302	2.739	1224.05	1140.72	294.
660.00	93.617	.018593	.080502	2.997	3.320	2.790	1257.16	1171.71	299.
670.00	91.378	.018017	.083045	3.026	3.340	2.840	1290.46	1202.91	303.
680.00	89.273	.017482	.085549	3.055	3.359	2.890	1323.95	1234.34	307.
690.00	87.287	.016982	.088015	3.083	3.380	2.939	1357.65	1266.00	311.
700.00	85.411	.016514	.090446	3.111	3.400	2.988	1391.55	1297.88	314.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

9.00 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND
				- - KJ/KG /DEG K) - -			- - KJ/KG - -		M/SEC
250.00	616.944	.89031	.91656	1.573	2.141	-.122	-16.55	-31.14	1117.
260.00	607.147	.83396	.84353	1.596	2.178	-.037	5.04	-9.78	1073.
270.00	597.161	.77982	.77300	1.621	2.217	.045	27.01	11.94	1028.
280.00	586.961	.72783	.70538	1.649	2.259	.127	49.39	34.05	983.
290.00	576.516	.67793	.64096	1.680	2.305	.207	72.20	56.59	938.
300.00	565.797	.63010	.57988	1.714	2.355	.286	95.50	79.60	893.
310.00	554.772	.58429	.52221	1.751	2.409	.364	119.33	103.10	848.
320.00	543.407	.54044	.46793	1.790	2.466	.441	143.70	127.14	803.
330.00	531.659	.49852	.41702	1.831	2.526	.518	168.66	151.73	759.
340.00	519.481	.45846	.36939	1.872	2.589	.594	194.24	176.91	715.
350.00	506.815	.42020	.32497	1.915	2.655	.670	220.45	202.70	671.
360.00	493.595	.38367	.28367	1.958	2.724	.746	247.35	229.11	628.
370.00	479.735	.34880	.24542	2.001	2.798	.822	274.95	256.19	586.
380.00	465.132	.31553	.21015	2.044	2.876	.897	303.32	283.97	544.
390.00	449.659	.28379	.17782	2.087	2.961	.973	332.50	312.48	502.
400.00	433.155	.25353	.14843	2.130	3.054	1.049	362.56	341.78	461.
410.00	415.424	.22473	.12201	2.174	3.157	1.126	393.60	371.94	421.
420.00	396.232	.19738	.098657	2.217	3.274	1.203	425.75	403.03	382.
430.00	375.327	.17158	.078562	2.260	3.404	1.282	459.12	435.14	344.
440.00	352.506	.14752	.061978	2.303	3.547	1.362	493.87	468.34	309.
450.00	327.799	.12556	.049191	2.345	3.687	1.443	530.05	502.60	278.
460.00	301.770	.10619	.040360	2.385	3.796	1.526	567.51	537.69	253.
470.00	275.724	.089882	.035267	2.421	3.838	1.608	605.75	573.11	236.
480.00	251.330	.076734	.033229	2.454	3.801	1.688	644.00	608.19	227.
490.00	229.798	.066421	.033346	2.484	3.712	1.766	681.59	642.42	223.
500.00	211.480	.058389	.034824	2.513	3.607	1.840	718.18	675.63	224.
510.00	196.119	.052088	.037103	2.542	3.511	1.910	753.76	707.87	226.
520.00	183.232	.047073	.039828	2.571	3.432	1.978	788.46	739.35	231.
530.00	172.330	.043012	.042788	2.600	3.372	2.042	822.47	770.24	236.
540.00	163.006	.039668	.045858	2.630	3.328	2.105	855.95	800.74	241.
550.00	154.936	.036870	.048963	2.661	3.297	2.166	889.07	830.98	246.
560.00	147.874	.034494	.052063	2.692	3.277	2.225	921.93	861.07	252.
570.00	141.630	.032451	.055134	2.723	3.266	2.283	954.64	891.10	257.
580.00	136.059	.030674	.058162	2.754	3.261	2.340	987.27	921.13	262.
590.00	131.049	.029113	.061141	2.786	3.262	2.395	1019.89	951.21	268.
600.00	126.510	.027729	.064068	2.817	3.267	2.450	1052.52	981.38	273.
- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
610.00	122.372	.026492	.066943	2.848	3.275	2.504	1085.23	1011.68	277.
620.00	118.578	.025378	.069767	2.878	3.285	2.558	1118.03	1042.13	282.
630.00	115.083	.024370	.072541	2.909	3.298	2.610	1150.94	1072.74	287.
640.00	111.848	.023451	.075268	2.939	3.313	2.662	1183.99	1103.53	291.
650.00	108.842	.022611	.077949	2.968	3.328	2.714	1217.20	1134.51	296.
660.00	106.039	.021838	.080587	2.998	3.345	2.765	1250.56	1165.69	300.
670.00	103.416	.021124	.083184	3.027	3.363	2.815	1284.11	1197.08	304.
680.00	100.954	.020462	.085742	3.056	3.381	2.865	1317.83	1228.68	308.
690.00	98.638	.019847	.088264	3.084	3.400	2.915	1351.73	1260.49	312.
700.00	96.452	.019273	.090750	3.112	3.420	2.964	1385.83	1292.52	316.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

10.00 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND
				- - KJ/KG /DEG K) - -			- - KJ/KG	- -	M/SEC
250.00	618.022	.90432	.93936	1.568	2.138	-.125	-15.57	-31.75	1132.
260.00	608.317	.84698	.86537	1.592	2.174	-.040	6.00	-10.44	1087.
270.00	598.438	.79208	.79406	1.617	2.212	.043	27.93	11.22	1042.
280.00	588.358	.73951	.72582	1.645	2.254	.124	50.26	33.26	997.
290.00	578.052	.68920	.66091	1.676	2.300	.204	73.02	55.72	952.
300.00	567.493	.64108	.59944	1.710	2.349	.282	96.26	78.64	907.
310.00	556.653	.59508	.54145	1.747	2.402	.360	120.01	102.05	863.
320.00	545.501	.55114	.48694	1.786	2.457	.437	144.30	125.97	818.
330.00	534.004	.50922	.43586	1.827	2.515	.514	169.16	150.44	775.
340.00	522.121	.46923	.38811	1.869	2.576	.590	194.62	175.47	731.
350.00	509.807	.43113	.34362	1.911	2.639	.666	220.70	201.08	689.
360.00	497.009	.39483	.30229	1.954	2.705	.741	247.42	227.30	647.
370.00	483.662	.36028	.26403	1.996	2.774	.816	274.81	254.13	606.
380.00	469.690	.32741	.22877	2.039	2.846	.891	302.91	281.62	565.
390.00	455.005	.29616	.19644	2.082	2.923	.966	331.75	309.77	525.
400.00	439.500	.26649	.16703	2.124	3.005	1.041	361.39	338.63	486.
410.00	423.052	.23837	.14051	2.167	3.093	1.116	391.87	368.23	448.
420.00	405.526	.21179	.11695	2.209	3.189	1.192	423.27	398.61	411.
430.00	386.791	.18682	.096413	2.251	3.291	1.268	455.67	429.81	375.
440.00	366.754	.16356	.079034	2.292	3.400	1.345	489.12	461.85	342.
450.00	345.439	.14219	.064946	2.333	3.507	1.422	523.66	494.71	312.
460.00	323.104	.12298	.054231	2.372	3.601	1.501	559.22	528.27	287.
470.00	300.345	.10619	.046808	2.410	3.665	1.579	595.58	562.29	267.
480.00	278.063	.091960	.042348	2.445	3.685	1.656	632.37	596.41	253.
490.00	257.196	.080226	.040296	2.479	3.662	1.732	669.14	630.26	244.
500.00	238.391	.070706	.040025	2.510	3.609	1.806	705.51	663.56	240.
510.00	221.878	.063021	.040977	2.541	3.545	1.876	741.28	696.21	239.
520.00	207.564	.056793	.042728	2.571	3.482	1.945	776.41	728.23	241.
530.00	195.197	.051700	.044981	2.601	3.428	2.010	810.95	759.72	243.
540.00	184.479	.047486	.047542	2.632	3.384	2.074	845.00	790.79	247.
550.00	175.134	.043956	.050283	2.663	3.352	2.136	878.67	821.57	252.
560.00	166.924	.040962	.053123	2.694	3.328	2.196	912.06	852.15	256.
570.00	159.654	.038395	.056008	2.725	3.313	2.255	945.26	882.63	261.
580.00	153.167	.036168	.058907	2.756	3.305	2.312	978.35	913.06	266.
590.00	147.336	.034219	.061797	2.787	3.302	2.369	1011.38	943.51	271.
600.00	142.062	.032493	.064666	2.818	3.304	2.424	1044.41	974.01	275.
- - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - -
610.00	137.261	.030966	.067505	2.849	3.309	2.479	1077.47	1004.61	280.
620.00	132.867	.029592	.070311	2.879	3.317	2.533	1110.59	1035.33	285.
630.00	128.827	.028353	.073081	2.910	3.327	2.586	1143.81	1066.19	289.
640.00	125.094	.027229	.075813	2.940	3.340	2.638	1177.14	1097.20	293.
650.00	121.632	.026203	.078508	2.969	3.354	2.690	1210.61	1128.39	298.
660.00	118.409	.025263	.081166	2.999	3.369	2.742	1244.22	1159.77	302.
670.00	115.399	.024397	.083788	3.028	3.385	2.792	1277.99	1191.34	306.
680.00	112.579	.023598	.086375	3.056	3.402	2.843	1311.93	1223.10	310.
690.00	109.929	.022856	.088928	3.085	3.420	2.892	1346.04	1255.07	314.
700.00	107.433	.022166	.091449	3.112	3.438	2.942	1380.33	1287.25	318.

H* = H(T) - H(N.B.T.LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV - - KJ/KG /DEG K) - -	CP	S*	H* - - KJ/KG - -	U	VEL SND M/SEC
250.00	623.053	.96888	1.0493	1.549	2.125	-.137	-10.57	-34.64	1200.
260.00	613.766	.90691	.97068	1.574	2.159	-.053	10.85	-13.59	1154.
270.00	604.360	.84843	.89560	1.600	2.194	.029	32.61	7.80	1108.
280.00	594.814	.79311	.82430	1.629	2.233	.110	54.75	29.53	1063.
290.00	585.111	.74071	.75687	1.662	2.276	.189	77.29	51.65	1018.
300.00	575.236	.69106	.69336	1.697	2.321	.267	100.27	74.20	974.
310.00	565.172	.64400	.63372	1.734	2.370	.344	123.72	97.18	930.
320.00	554.906	.59941	.57787	1.774	2.420	.420	147.67	120.64	888.
330.00	544.422	.55717	.52571	1.815	2.472	.495	172.13	144.58	846.
340.00	533.704	.51718	.47711	1.857	2.526	.569	197.12	169.02	806.
350.00	522.737	.47935	.43193	1.899	2.580	.643	222.65	193.96	766.
360.00	511.503	.44359	.39004	1.941	2.636	.717	248.73	219.41	728.
370.00	499.985	.40981	.35131	1.984	2.691	.790	275.36	245.36	690.
380.00	488.167	.37794	.31561	2.026	2.748	.862	302.56	271.83	654.
390.00	476.030	.34791	.28282	2.068	2.804	.935	330.32	298.81	619.
400.00	463.559	.31966	.25285	2.109	2.861	1.006	358.64	326.29	586.
410.00	450.741	.29312	.22558	2.150	2.919	1.078	387.54	354.26	553.
420.00	437.569	.26826	.20093	2.190	2.976	1.149	417.02	382.73	522.
430.00	424.042	.24502	.17883	2.230	3.033	1.219	447.06	411.68	493.
440.00	410.173	.22339	.15920	2.269	3.089	1.290	477.67	441.10	466.
450.00	395.991	.20335	.14197	2.308	3.144	1.360	508.83	470.95	440.
460.00	381.549	.18486	.12707	2.346	3.196	1.429	540.53	501.22	416.
470.00	366.925	.16793	.11439	2.383	3.244	1.499	572.73	531.85	395.
480.00	352.228	.15252	.10382	2.420	3.287	1.567	605.39	562.81	376.
490.00	337.592	.13862	.095239	2.456	3.324	1.636	638.45	594.02	359.
500.00	323.172	.12616	.088470	2.492	3.353	1.703	671.84	625.43	345.
510.00	309.125	.11507	.083324	2.527	3.375	1.770	705.49	656.96	334.
520.00	295.597	.10527	.079598	2.561	3.390	1.835	739.32	688.57	325.
530.00	282.708	.096644	.077083	2.595	3.398	1.900	773.26	720.20	318.
540.00	270.543	.089063	.075581	2.628	3.403	1.964	807.27	751.83	313.
550.00	259.148	.082424	.074908	2.661	3.404	2.026	841.30	783.42	310.
560.00	248.535	.076592	.074905	2.694	3.404	2.087	875.34	814.99	308.
570.00	238.689	.071464	.075439	2.726	3.403	2.148	909.38	846.53	307.
580.00	229.575	.066941	.076396	2.758	3.403	2.207	943.41	878.07	307.
590.00	221.148	.062937	.077688	2.789	3.405	2.265	977.45	909.62	308.
600.00	213.355	.059379	.079240	2.821	3.407	2.322	1011.51	941.20	309.
610.00	206.143	.056204	.080996	2.852	3.412	2.379	1045.60	972.84	311.
620.00	199.460	.053357	.082909	2.882	3.418	2.434	1079.74	1004.54	314.
630.00	193.256	.050794	.084944	2.913	3.425	2.489	1113.96	1036.34	316.
640.00	187.486	.048476	.087073	2.943	3.434	2.543	1148.25	1068.25	319.
650.00	182.108	.046371	.089272	2.973	3.445	2.596	1182.65	1100.28	322.
660.00	177.085	.044453	.091525	3.002	3.456	2.649	1217.15	1132.44	325.
670.00	172.384	.042696	.093817	3.031	3.469	2.701	1251.77	1164.76	328.
680.00	167.971	.041084	.096138	3.059	3.482	2.752	1286.53	1197.23	331.
690.00	163.829	.039597	.098478	3.088	3.497	2.803	1321.43	1229.87	334.
700.00	159.924	.038223	.10083	3.115	3.512	2.854	1356.47	1262.68	337.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

20.00 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND
				- - KJ/KG /DEG K) - -			- - KJ/KG	- -	M/SEC
250.00	627.594	1.0258	1.1536	1.535	2.114	-.149	-5.47	-37.34	1260.
260.00	618.667	.95970	1.0706	1.562	2.146	-.065	15.83	-16.50	1213.
270.00	609.660	.89794	.99192	1.589	2.180	.017	37.46	4.65	1166.
280.00	600.558	.84006	.91762	1.619	2.217	.097	59.44	26.14	1121.
290.00	591.347	.78567	.84770	1.653	2.257	.175	81.80	47.98	1076.
300.00	582.018	.73449	.78209	1.689	2.300	.252	104.58	70.22	1032.
310.00	572.562	.68628	.72069	1.727	2.345	.328	127.80	92.87	989.
320.00	562.971	.64085	.66334	1.768	2.393	.404	151.49	115.97	948.
330.00	553.238	.59804	.60990	1.809	2.441	.478	175.66	139.51	907.
340.00	543.358	.55770	.56018	1.851	2.491	.552	200.32	163.52	868.
350.00	533.325	.51971	.51403	1.894	2.541	.625	225.48	187.98	830.
360.00	523.136	.48394	.47127	1.937	2.591	.697	251.14	212.91	794.
370.00	512.786	.45030	.43172	1.980	2.641	.768	277.30	238.29	759.
380.00	502.274	.41867	.39524	2.022	2.690	.840	303.95	264.13	725.
390.00	491.600	.38898	.36166	2.064	2.739	.910	331.10	290.41	693.
400.00	480.764	.36112	.33084	2.105	2.788	.980	358.73	317.13	662.
410.00	469.771	.33503	.30266	2.146	2.835	1.049	386.84	344.27	632.
420.00	458.628	.31062	.27697	2.187	2.882	1.118	415.43	371.82	604.
430.00	447.345	.28783	.25365	2.226	2.928	1.187	444.49	399.78	578.
440.00	435.940	.26658	.23260	2.265	2.973	1.255	473.99	428.11	552.
450.00	424.432	.24683	.21370	2.304	3.016	1.322	503.94	456.81	529.
460.00	412.849	.22850	.19683	2.342	3.058	1.389	534.31	485.86	507.
470.00	401.226	.21154	.18189	2.379	3.098	1.455	565.09	515.24	487.
480.00	389.603	.19589	.16876	2.416	3.135	1.520	596.25	544.92	468.
490.00	378.026	.18150	.15732	2.452	3.170	1.585	627.78	574.88	451.
500.00	366.547	.16831	.14747	2.488	3.203	1.650	659.65	605.09	436.
510.00	355.219	.15625	.13908	2.524	3.233	1.713	691.84	635.53	422.
520.00	344.096	.14525	.13202	2.559	3.260	1.777	724.31	666.18	410.
530.00	333.231	.13524	.12617	2.593	3.285	1.839	757.04	697.02	400.
540.00	322.672	.12617	.12140	2.627	3.307	1.900	790.00	728.02	391.
550.00	312.458	.11794	.11760	2.661	3.327	1.961	823.17	759.16	383.
560.00	302.623	.11050	.11465	2.694	3.345	2.021	856.53	790.44	377.
570.00	293.190	.10376	.11245	2.727	3.362	2.081	890.07	821.85	372.
580.00	284.173	.097661	.11090	2.759	3.377	2.139	923.76	853.38	368.
590.00	275.578	.092139	.10990	2.791	3.391	2.197	957.60	885.03	365.
600.00	267.404	.087134	.10939	2.823	3.405	2.254	991.58	916.79	363.
- - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - -
610.00	259.643	.082589	.10929	2.854	3.419	2.311	1025.70	948.67	362.
620.00	252.285	.078457	.10954	2.885	3.432	2.366	1059.96	980.68	361.
630.00	245.313	.074690	.11009	2.915	3.446	2.422	1094.35	1012.82	361.
640.00	238.710	.071250	.11089	2.945	3.460	2.476	1128.88	1045.09	361.
650.00	232.456	.068101	.11191	2.975	3.474	2.530	1163.54	1077.50	361.
660.00	226.533	.065212	.11312	3.005	3.488	2.583	1198.35	1110.06	362.
670.00	220.920	.062554	.11448	3.033	3.503	2.635	1233.30	1142.77	364.
680.00	215.598	.060103	.11597	3.062	3.518	2.687	1268.41	1175.64	365.
690.00	210.548	.057837	.11757	3.090	3.533	2.739	1303.66	1208.67	367.
700.00	205.753	.055738	.11926	3.118	3.549	2.790	1339.07	1241.87	368.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

25.00 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV - - KJ/KG	CP /DEG K) - -	S*	H* - - KJ/KG	U - -	VEL SND M/SEC
250.00	631.749	1.0767	1.2534	1.526	2.105	-.160	-.28	-39.86	1315.
260.00	623.139	1.0068	1.1662	1.554	2.136	-.076	20.92	-19.20	1266.
270.00	614.479	.94203	1.0841	1.582	2.168	.005	42.43	1.75	1219.
280.00	605.756	.88178	1.0069	1.614	2.203	.084	64.28	23.01	1172.
290.00	596.961	.82551	.93448	1.648	2.241	.162	86.50	44.62	1127.
300.00	588.086	.77285	.86677	1.685	2.283	.239	109.12	66.61	1084.
310.00	579.126	.72349	.80356	1.724	2.326	.314	132.16	88.99	1041.
320.00	570.078	.67718	.74465	1.765	2.372	.389	155.65	111.79	1000.
330.00	560.938	.63370	.68983	1.807	2.418	.463	179.59	135.03	961.
340.00	551.705	.59287	.63890	1.850	2.465	.536	204.01	158.69	923.
350.00	542.379	.55453	.59165	1.894	2.512	.608	228.89	182.80	886.
360.00	532.960	.51855	.54787	1.937	2.559	.679	254.25	207.34	851.
370.00	523.450	.48478	.50738	1.980	2.606	.750	280.07	232.31	817.
380.00	513.852	.45310	.46998	2.023	2.652	.820	306.36	257.71	785.
390.00	504.170	.42342	.43550	2.065	2.697	.889	333.10	283.52	754.
400.00	494.409	.39561	.40377	2.107	2.742	.958	360.30	309.73	725.
410.00	484.576	.36959	.37464	2.148	2.785	1.027	387.93	336.34	697.
420.00	474.682	.34526	.34794	2.189	2.828	1.094	416.00	363.33	670.
430.00	464.735	.32253	.32356	2.229	2.869	1.161	444.48	390.69	645.
440.00	454.750	.30133	.30133	2.268	2.909	1.228	473.37	418.40	622.
450.00	444.741	.28157	.28115	2.307	2.949	1.293	502.66	446.45	599.
460.00	434.727	.26318	.26289	2.345	2.986	1.359	532.34	474.83	579.
470.00	424.726	.24609	.24642	2.383	3.023	1.423	562.39	503.53	559.
480.00	414.762	.23022	.23164	2.420	3.058	1.487	592.80	532.52	541.
490.00	404.857	.21553	.21843	2.456	3.092	1.551	623.55	561.80	524.
500.00	395.036	.20192	.20669	2.492	3.124	1.613	654.63	591.35	509.
510.00	385.326	.18935	.19630	2.528	3.155	1.676	686.03	621.15	495.
520.00	375.752	.17775	.18717	2.563	3.184	1.737	717.73	651.19	482.
530.00	366.340	.16706	.17919	2.597	3.212	1.798	749.71	681.47	471.
540.00	357.113	.15721	.17227	2.631	3.239	1.858	781.97	711.96	460.
550.00	348.094	.14815	.16631	2.665	3.264	1.918	814.48	742.66	451.
560.00	339.302	.13982	.16122	2.698	3.288	1.977	847.25	773.56	443.
570.00	330.754	.13216	.15693	2.731	3.311	2.036	880.24	804.66	436.
580.00	322.463	.12512	.15336	2.763	3.333	2.093	913.46	835.93	430.
590.00	314.439	.11865	.15042	2.795	3.354	2.150	946.90	867.39	425.
600.00	306.688	.11270	.14805	2.827	3.374	2.207	980.54	899.02	420.
- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
610.00	299.215	.10722	.14619	2.858	3.394	2.263	1014.38	930.83	417.
620.00	292.019	.10218	.14479	2.889	3.413	2.318	1048.42	962.81	414.
630.00	285.100	.097525	.14379	2.920	3.432	2.373	1082.65	994.96	411.
640.00	278.453	.093231	.14315	2.950	3.451	2.427	1117.06	1027.28	409.
650.00	272.072	.089262	.14283	2.979	3.469	2.481	1151.66	1059.78	408.
660.00	265.951	.085589	.14278	3.008	3.487	2.534	1186.45	1092.44	407.
670.00	260.081	.082183	.14299	3.037	3.505	2.587	1221.41	1125.28	406.
680.00	254.453	.079021	.14341	3.066	3.523	2.639	1256.55	1158.30	406.
690.00	249.057	.076081	.14402	3.094	3.541	2.690	1291.87	1191.49	406.
700.00	243.884	.073342	.14481	3.122	3.559	2.741	1327.37	1224.86	406.

H* = H(T) - H(N.B.T.LIQUID) AND
S* = S(T) - S(N.B.T.LIQUID)

30.00 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV - - KJ/KG	CP /DEG K)	S* - -	H* - - KJ/KG	U - -	VEL SND M/SEC
250.00	635.593	1.1225	1.3493	1.519	2.097	-.170	4.98	-42.22	1365.
260.00	627.265	1.0492	1.2582	1.548	2.127	-.087	26.10	-21.73	1315.
270.00	618.911	.98168	1.1727	1.578	2.158	-.006	47.51	-.96	1266.
280.00	610.520	.91923	1.0927	1.611	2.191	.073	69.26	20.12	1219.
290.00	602.084	.86121	1.0179	1.646	2.229	.150	91.35	41.53	1174.
300.00	593.598	.80715	.94815	1.684	2.269	.226	113.84	63.30	1130.
310.00	585.058	.75667	.88313	1.724	2.311	.301	136.73	85.46	1088.
320.00	576.461	.70947	.82263	1.765	2.355	.376	160.06	108.02	1047.
330.00	567.809	.66530	.76640	1.808	2.399	.449	183.83	131.00	1008.
340.00	559.100	.62393	.71420	1.852	2.445	.521	208.05	154.39	971.
350.00	550.337	.58518	.66579	1.896	2.490	.593	232.73	178.21	935.
360.00	541.523	.54887	.62095	1.940	2.535	.663	257.85	202.46	901.
370.00	532.660	.51486	.57945	1.984	2.580	.733	283.43	227.11	868.
380.00	523.754	.48301	.54108	2.027	2.624	.803	309.45	252.18	837.
390.00	514.809	.45319	.50566	2.070	2.667	.871	335.91	277.64	807.
400.00	505.831	.42528	.47300	2.112	2.710	.940	362.80	303.49	779.
410.00	496.829	.39918	.44292	2.153	2.751	1.007	390.10	329.72	752.
420.00	487.809	.37477	.41527	2.194	2.791	1.074	417.81	356.32	727.
430.00	478.782	.35197	.38988	2.235	2.831	1.140	445.93	383.27	703.
440.00	469.757	.33068	.36662	2.274	2.869	1.205	474.43	410.56	680.
450.00	460.747	.31080	.34534	2.313	2.906	1.270	503.30	438.19	659.
460.00	451.762	.29227	.32593	2.352	2.942	1.335	532.55	466.14	639.
470.00	442.816	.27501	.30825	2.389	2.977	1.398	562.15	494.40	620.
480.00	433.924	.25893	.29219	2.427	3.011	1.461	592.09	522.96	602.
490.00	425.098	.24397	.27765	2.463	3.044	1.524	622.37	551.80	586.
500.00	416.354	.23006	.26450	2.499	3.076	1.586	652.98	580.92	571.
510.00	407.708	.21713	.25266	2.535	3.107	1.647	683.89	610.31	557.
520.00	399.172	.20512	.24203	2.570	3.137	1.707	715.12	639.96	544.
530.00	390.762	.19397	.23252	2.604	3.166	1.767	746.63	669.86	532.
540.00	382.492	.18363	.22404	2.638	3.194	1.827	778.43	700.00	521.
550.00	374.373	.17404	.21650	2.672	3.221	1.886	810.51	730.37	511.
560.00	366.418	.16514	.20984	2.705	3.247	1.944	842.85	760.97	502.
570.00	358.637	.15689	.20398	2.738	3.273	2.002	875.45	791.80	494.
580.00	351.038	.14923	.19884	2.770	3.297	2.059	908.29	822.83	487.
590.00	343.629	.14213	.19438	2.802	3.321	2.115	941.39	854.08	480.
600.00	336.416	.13554	.19052	2.833	3.345	2.171	974.72	885.54	474.
610.00	329.402	.12942	.18721	2.865	3.368	2.227	1008.28	917.21	469.
620.00	322.590	.12374	.18441	2.895	3.390	2.282	1042.07	949.07	465.
630.00	315.981	.11846	.18206	2.925	3.412	2.336	1076.08	981.13	461.
640.00	309.576	.11354	.18012	2.955	3.433	2.390	1110.30	1013.39	457.
650.00	303.374	.10896	.17856	2.985	3.454	2.444	1144.74	1045.85	455.
660.00	297.371	.10469	.17734	3.014	3.475	2.496	1179.39	1078.50	452.
670.00	291.565	.10071	.17642	3.042	3.496	2.549	1214.24	1111.35	450.
680.00	285.953	.096988	.17578	3.071	3.516	2.601	1249.30	1144.38	449.
690.00	280.529	.093507	.17539	3.099	3.536	2.652	1284.55	1177.61	447.
700.00	275.288	.090247	.17523	3.126	3.556	2.703	1320.01	1211.03	446.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV - - KJ/KG /DEG K) - -	CP	S*	H* - - KJ/KG - -	U	VEL SND M/SEC
250.00	639.176	1.1640	1.4420	1.516	2.091	-.180	10.30	-44.46	1410.
260.00	631.104	1.0876	1.3471	1.546	2.119	-.098	31.35	-24.11	1359.
270.00	623.025	1.0176	1.2585	1.577	2.149	-.017	52.69	-3.49	1310.
280.00	614.930	.95311	1.1757	1.610	2.182	.062	74.34	17.42	1262.
290.00	606.810	.89346	1.0986	1.646	2.218	.139	96.33	38.66	1217.
300.00	598.663	.83808	1.0268	1.684	2.257	.215	118.71	60.24	1173.
310.00	590.485	.78654	.95995	1.725	2.298	.289	141.48	82.21	1131.
320.00	582.276	.73849	.89787	1.768	2.341	.363	164.68	104.57	1090.
330.00	574.036	.69362	.84021	1.811	2.385	.436	188.30	127.33	1052.
340.00	565.766	.65170	.78673	1.855	2.429	.508	212.37	150.51	1015.
350.00	557.469	.61250	.73714	1.900	2.473	.579	236.88	174.10	980.
360.00	549.149	.57584	.69119	1.944	2.517	.649	261.83	198.10	946.
370.00	540.809	.54154	.64866	1.989	2.561	.718	287.22	222.50	914.
380.00	532.453	.50945	.60931	2.032	2.603	.787	313.04	247.31	883.
390.00	524.088	.47944	.57294	2.076	2.645	.855	339.28	272.50	855.
400.00	515.719	.45136	.53934	2.118	2.686	.923	365.94	298.07	827.
410.00	507.353	.42511	.50833	2.160	2.726	.990	393.01	324.02	801.
420.00	498.996	.40056	.47975	2.201	2.766	1.056	420.47	350.33	776.
430.00	490.657	.37762	.45342	2.242	2.804	1.121	448.31	376.98	753.
440.00	482.343	.35618	.42920	2.282	2.841	1.186	476.54	403.97	731.
450.00	474.062	.33615	.40694	2.321	2.877	1.251	505.13	431.30	710.
460.00	465.825	.31746	.38652	2.360	2.912	1.314	534.08	458.94	691.
470.00	457.639	.30000	.36779	2.398	2.947	1.377	563.37	486.89	672.
480.00	449.514	.28371	.35066	2.435	2.980	1.440	593.01	515.14	655.
490.00	441.461	.26851	.33500	2.471	3.013	1.501	622.97	543.69	639.
500.00	433.487	.25434	.32072	2.508	3.044	1.563	653.25	572.51	624.
510.00	425.603	.24112	.30771	2.543	3.075	1.623	683.85	601.62	610.
520.00	417.818	.22880	.29589	2.578	3.105	1.683	714.75	630.99	597.
530.00	410.141	.21731	.28516	2.613	3.134	1.743	745.95	660.62	585.
540.00	402.580	.20660	.27544	2.647	3.163	1.801	777.44	690.50	574.
550.00	395.142	.19662	.26667	2.680	3.191	1.860	809.21	720.63	563.
560.00	387.836	.18731	.25876	2.713	3.218	1.917	841.25	751.01	554.
570.00	380.667	.17863	.25165	2.746	3.245	1.975	873.57	781.62	545.
580.00	373.641	.17054	.24528	2.778	3.271	2.031	906.14	812.47	537.
590.00	366.762	.16298	.23958	2.810	3.296	2.087	938.97	843.55	530.
600.00	360.036	.15593	.23451	2.841	3.321	2.143	972.06	874.85	524.
610.00	353.465	.14935	.23001	2.872	3.345	2.198	1005.39	906.37	518.
620.00	347.050	.14320	.22604	2.902	3.369	2.253	1038.96	938.11	512.
630.00	340.795	.13745	.22255	2.932	3.393	2.307	1072.77	970.07	507.
640.00	334.699	.13207	.21951	2.962	3.416	2.360	1106.82	1002.24	503.
650.00	328.762	.12703	.21687	2.991	3.439	2.414	1141.09	1034.63	499.
660.00	322.984	.12230	.21461	3.020	3.461	2.466	1175.59	1067.22	496.
670.00	317.363	.11788	.21269	3.048	3.483	2.518	1210.31	1100.02	493.
680.00	311.899	.11372	.21108	3.077	3.505	2.570	1245.25	1133.03	490.
690.00	306.588	.10981	.20976	3.104	3.526	2.622	1280.40	1166.24	488.
700.00	301.428	.10613	.20871	3.132	3.547	2.672	1315.77	1199.66	486.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

40.00 MPA ISOBAR

T DEG K	DENSITY KG/M3	DP/DT MPA/K	DP/DD MPA/(KG/M3)	CV	CP	S*	H*	U	VEL SND
				- - KJ/KG /DEG K) - -			- - KJ/KG	- -	M/SEC
250.00	642.539	1.2020	1.5319	1.514	2.085	-.190	15.68	-46.57	1452.
260.00	634.701	1.1226	1.4334	1.545	2.113	-.108	36.67	-26.35	1400.
270.00	626.872	1.0503	1.3417	1.577	2.142	-.027	57.94	-5.87	1350.
280.00	619.042	.98394	1.2563	1.611	2.174	.051	79.51	14.90	1302.
290.00	611.206	.92277	1.1769	1.647	2.209	.128	101.42	35.98	1256.
300.00	603.360	.86616	1.1030	1.687	2.247	.204	123.70	57.41	1212.
310.00	595.501	.81362	1.0344	1.728	2.288	.278	146.38	79.21	1170.
320.00	587.629	.76475	.97078	1.771	2.330	.351	169.46	101.39	1130.
330.00	579.746	.71922	.91170	1.815	2.372	.424	192.97	123.97	1092.
340.00	571.852	.67675	.85692	1.860	2.416	.495	216.91	146.96	1055.
350.00	563.952	.63711	.80614	1.905	2.459	.566	241.29	170.36	1020.
360.00	556.047	.60008	.75910	1.950	2.502	.636	266.10	194.16	987.
370.00	548.143	.56547	.71552	1.995	2.545	.705	291.34	218.36	955.
380.00	540.243	.53312	.67518	2.039	2.587	.773	317.00	242.96	926.
390.00	532.353	.50288	.63786	2.083	2.628	.841	343.07	267.94	897.
400.00	524.477	.47461	.60333	2.126	2.668	.908	369.56	293.29	870.
410.00	516.622	.44817	.57142	2.168	2.708	.974	396.44	319.01	845.
420.00	508.793	.42346	.54193	2.209	2.746	1.040	423.71	345.09	821.
430.00	500.996	.40035	.51471	2.250	2.784	1.105	451.36	371.52	798.
440.00	493.238	.37875	.48958	2.290	2.820	1.170	479.38	398.29	776.
450.00	485.526	.35856	.46641	2.330	2.856	1.233	507.76	425.38	756.
460.00	477.866	.33968	.44506	2.368	2.891	1.296	536.50	452.79	737.
470.00	470.264	.32204	.42540	2.406	2.925	1.359	565.57	480.52	719.
480.00	462.727	.30555	.40731	2.444	2.958	1.421	594.99	508.54	702.
490.00	455.263	.29014	.39069	2.481	2.990	1.482	624.72	536.86	686.
500.00	447.877	.27573	.37542	2.517	3.021	1.543	654.78	565.47	671.
510.00	440.575	.26227	.36141	2.552	3.052	1.603	685.15	594.36	657.
520.00	433.365	.24969	.34858	2.587	3.082	1.663	715.82	623.52	644.
530.00	426.251	.23792	.33682	2.622	3.112	1.722	746.80	652.96	632.
540.00	419.239	.22692	.32608	2.656	3.141	1.780	778.06	682.65	621.
550.00	412.335	.21663	.31627	2.689	3.169	1.838	809.61	712.60	611.
560.00	405.542	.20700	.30732	2.722	3.197	1.895	841.44	742.80	601.
570.00	398.865	.19799	.29917	2.754	3.224	1.952	873.54	773.26	592.
580.00	392.307	.18956	.29177	2.786	3.250	2.008	905.91	803.95	583.
590.00	385.872	.18166	.28504	2.818	3.277	2.064	938.55	834.89	576.
600.00	379.561	.17426	.27896	2.849	3.302	2.120	971.44	866.06	569.
- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
610.00	373.379	.16732	.27345	2.880	3.328	2.174	1004.59	897.46	562.
620.00	367.324	.16081	.26849	2.910	3.352	2.229	1037.99	929.10	556.
630.00	361.400	.15470	.26404	2.940	3.377	2.282	1071.64	960.96	551.
640.00	355.607	.14896	.26004	2.969	3.401	2.336	1105.53	993.05	546.
650.00	349.944	.14356	.25647	2.998	3.425	2.389	1139.66	1025.35	541.
660.00	344.412	.13848	.25330	3.027	3.448	2.441	1174.02	1057.88	537.
670.00	339.010	.13370	.25050	3.055	3.471	2.493	1208.62	1090.63	533.
680.00	333.737	.12920	.24803	3.083	3.494	2.545	1243.44	1123.59	530.
690.00	328.591	.12495	.24588	3.110	3.516	2.596	1278.47	1156.76	527.
700.00	323.573	.12094	.24401	3.138	3.538	2.647	1313.76	1190.14	525.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV - - J/MOL	CP /DEG K)	S* - -	H* - - J/MOL	U - -	VEL SND M/SEC
250.00	.00483	.40301-3	20.616	76.	84.	97.2	20482.	18412.	199.
260.00	.00464	.38723-3	21.460	78.	87.	100.6	21335.	19181.	202.
270.00	.00447	.37266-3	22.302	81.	89.	103.9	22214.	19977.	206.
280.00	.00431	.35915-3	23.143	84.	92.	107.2	23120.	20799.	209.
290.00	.00416	.34659-3	23.984	86.	95.	110.5	24053.	21648.	213.
300.00	.00402	.33489-3	24.823	89.	97.	113.7	25013.	22525.	216.
310.00	.00389	.32397-3	25.662	92.	100.	117.0	26000.	23428.	220.
320.00	.00377	.31373-3	26.500	94.	103.	120.2	27015.	24359.	223.
330.00	.00365	.30413-3	27.338	97.	106.	123.4	28056.	25318.	226.
340.00	.00354	.29510-3	28.175	100.	108.	126.6	29126.	26303.	229.
350.00	.00344	.28660-3	29.012	103.	111.	129.8	30222.	27317.	232.
360.00	.00335	.27858-3	29.849	105.	114.	132.9	31346.	28357.	235.
370.00	.00325	.27099-3	30.685	108.	116.	136.1	32497.	29425.	238.
380.00	.00317	.26381-3	31.521	111.	119.	139.2	33675.	30520.	241.
390.00	.00309	.25701-3	32.356	113.	122.	142.4	34880.	31641.	244.
400.00	.00301	.25054-3	33.191	116.	124.	145.5	36112.	32789.	247.
410.00	.00294	.24440-3	34.026	119.	127.	148.6	37370.	33964.	250.
420.00	.00287	.23855-3	34.861	121.	130.	151.7	38654.	35165.	253.
430.00	.00280	.23298-3	35.695	124.	132.	154.8	39963.	36391.	256.
440.00	.00274	.22766-3	36.530	126.	135.	157.8	41299.	37643.	259.
450.00	.00267	.22258-3	37.364	129.	137.	160.9	42659.	38920.	262.
460.00	.00262	.21772-3	38.198	131.	140.	163.9	44044.	40222.	264.
470.00	.00256	.21307-3	39.032	134.	142.	167.0	45454.	41548.	267.
480.00	.00251	.20862-3	39.866	136.	145.	170.0	46887.	42899.	270.
490.00	.00246	.20434-3	40.699	139.	147.	173.0	48345.	44273.	272.
500.00	.00241	.20024-3	41.533	141.	149.	176.0	49825.	45670.	275.
510.00	.00236	.19631-3	42.366	143.	152.	178.9	51329.	47091.	278.
520.00	.00231	.19252-3	43.200	145.	154.	181.9	52855.	48534.	280.
530.00	.00227	.18888-3	44.033	148.	156.	184.9	54404.	49999.	283.
540.00	.00223	.18537-3	44.866	150.	158.	187.8	55974.	51486.	285.
550.00	.00219	.18199-3	45.699	152.	160.	190.7	57566.	52995.	288.
560.00	.00215	.17874-3	46.532	154.	162.	193.6	59179.	54525.	290.
570.00	.00211	.17559-3	47.365	156.	164.	196.5	60813.	56075.	293.
580.00	.00207	.17256-3	48.198	158.	166.	199.4	62468.	57647.	295.
590.00	.00204	.16963-3	49.031	160.	168.	202.3	64142.	59238.	298.
600.00	.00201	.16680-3	49.863	162.	170.	205.1	65836.	60849.	300.
610.00	.00197	.16406-3	50.696	164.	172.	207.9	67550.	62479.	303.
620.00	.00194	.16141-3	51.529	166.	174.	210.8	69283.	64129.	305.
630.00	.00191	.15884-3	52.361	168.	176.	213.6	71035.	65798.	307.
640.00	.00188	.15635-3	53.194	170.	178.	216.3	72805.	67485.	310.
650.00	.00185	.15394-3	54.026	171.	180.	219.1	74593.	69190.	312.
660.00	.00182	.15161-3	54.859	173.	182.	221.9	76400.	70913.	315.
670.00	.00180	.14934-3	55.691	175.	183.	224.6	78224.	72654.	317.
680.00	.00177	.14714-3	56.524	177.	185.	227.3	80065.	74412.	319.
690.00	.00174	.14501-3	57.356	178.	187.	230.1	81923.	76187.	321.
700.00	.00172	.14293-3	58.189	180.	188.	232.8	83799.	77979.	324.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

.50 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV - - J/MOL	CP /DEG K)	S* - -	H* - - J/MOL	U - -	VEL SND M/SEC
250.00	.02457	.20835-2	19.902	76.	85.	83.6	20380.	18346.	196.
260.00	.02357	.19943-2	20.803	78.	87.	87.0	21241.	19120.	200.
270.00	.02265	.19131-2	21.695	81.	90.	90.3	22127.	19920.	204.
280.00	.02180	.18388-2	22.581	84.	92.	93.6	23039.	20745.	207.
290.00	.02102	.17704-2	23.460	86.	95.	96.9	23977.	21598.	211.
300.00	.02029	.17072-2	24.335	89.	98.	100.2	24941.	22477.	214.
310.00	.01962	.16487-2	25.206	92.	100.	103.4	25932.	23383.	218.
320.00	.01898	.15942-2	26.073	95.	103.	106.7	26951.	24317.	221.
330.00	.01839	.15433-2	26.937	97.	106.	109.9	27996.	25277.	225.
340.00	.01784	.14957-2	27.799	100.	109.	113.1	29068.	26265.	228.
350.00	.01731	.14511-2	28.658	103.	111.	116.3	30168.	27280.	231.
360.00	.01682	.14092-2	29.514	105.	114.	119.5	31295.	28322.	234.
370.00	.01636	.13697-2	30.369	108.	117.	122.6	32448.	29392.	237.
380.00	.01592	.13324-2	31.223	111.	119.	125.8	33629.	30488.	241.
390.00	.01550	.12971-2	32.074	114.	122.	128.9	34836.	31611.	244.
400.00	.01511	.12637-2	32.925	116.	125.	132.0	36069.	32760.	247.
410.00	.01474	.12321-2	33.774	119.	127.	135.1	37329.	33936.	250.
420.00	.01438	.12020-2	34.622	121.	130.	138.2	38615.	35138.	252.
430.00	.01404	.11733-2	35.469	124.	132.	141.3	39926.	36365.	255.
440.00	.01372	.11461-2	36.315	126.	135.	144.4	41263.	37618.	258.
450.00	.01341	.11201-2	37.160	129.	137.	147.4	42625.	38896.	261.
460.00	.01311	.10952-2	38.005	131.	140.	150.5	44011.	40199.	264.
470.00	.01283	.10715-2	38.848	134.	142.	153.5	45422.	41526.	267.
480.00	.01256	.10488-2	39.691	136.	145.	156.5	46857.	42877.	269.
490.00	.01230	.10270-2	40.534	139.	147.	159.6	48315.	44252.	272.
500.00	.01206	.10061-2	41.376	141.	149.	162.5	49797.	45650.	275.
510.00	.01182	.98611-3	42.217	143.	152.	165.5	51302.	47071.	277.
520.00	.01159	.96688-3	43.058	145.	154.	168.5	52829.	48514.	280.
530.00	.01137	.94839-3	43.898	148.	156.	171.4	54378.	49980.	283.
540.00	.01116	.93060-3	44.738	150.	158.	174.4	55950.	51468.	285.
550.00	.01095	.91348-3	45.578	152.	160.	177.3	57543.	52977.	288.
560.00	.01076	.89698-3	46.417	154.	162.	180.2	59156.	54508.	290.
570.00	.01057	.88107-3	47.256	156.	164.	183.1	60791.	56059.	293.
580.00	.01038	.86572-3	48.095	158.	167.	186.0	62446.	57630.	295.
590.00	.01021	.85090-3	48.933	160.	169.	188.8	64121.	59222.	298.
600.00	.01003	.83658-3	49.771	162.	170.	191.7	65816.	60833.	300.
610.00	.00987	.82274-3	50.609	164.	172.	194.5	67531.	62464.	303.
620.00	.00971	.80935-3	51.447	166.	174.	197.3	69264.	64114.	305.
630.00	.00955	.79640-3	52.284	168.	176.	200.2	71016.	65783.	307.
640.00	.00940	.78385-3	53.121	170.	178.	202.9	72787.	67470.	310.
650.00	.00926	.77170-3	53.958	171.	180.	205.7	74576.	69176.	312.
660.00	.00912	.75992-3	54.795	173.	182.	208.5	76383.	70899.	314.
670.00	.00898	.74850-3	55.631	175.	183.	211.2	78207.	72640.	317.
680.00	.00885	.73741-3	56.467	177.	185.	213.9	80049.	74399.	319.
690.00	.00872	.72666-3	57.304	178.	187.	216.7	81908.	76174.	321.
700.00	.00860	.71621-3	58.140	180.	188.	219.4	83784.	77967.	324.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

1.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV	CP	S*	H*	U	VEL SND M/SEC
				- - J/MOL /DEG K) - -			- - J/MOL - -		
250.00	10.42396	7.4361	405.42	95.	126.	-5.7	-1457.	-1466.	963.
260.00	10.23769	6.9722	368.35	96.	129.	-.7	-180.	-190.	922.
261.06	10.21762	6.9228	364.43	96.	129.	-.2	-43.	-53.	917.
261.06	.04790	.41412-2	20.023	79.	89.	81.2	21207.	19119.	197.
270.00	.04613	.39707-2	20.891	81.	91.	84.3	22010.	19842.	200.
280.00	.04431	.37993-2	21.843	84.	93.	87.6	22930.	20674.	204.
290.00	.04265	.36445-2	22.780	87.	96.	90.9	23876.	21531.	208.
300.00	.04111	.35037-2	23.706	89.	98.	94.2	24848.	22415.	212.
310.00	.03968	.33748-2	24.621	92.	101.	97.5	25845.	23325.	216.
320.00	.03836	.32561-2	25.527	95.	104.	100.7	26869.	24262.	219.
330.00	.03713	.31463-2	26.427	97.	106.	104.0	27919.	25226.	223.
340.00	.03598	.30443-2	27.321	100.	109.	107.2	28996.	26216.	226.
350.00	.03490	.29493-2	28.209	103.	112.	110.4	30099.	27234.	230.
360.00	.03388	.28605-2	29.092	106.	114.	113.6	31229.	28278.	234.
370.00	.03293	.27772-2	29.972	108.	117.	116.7	32386.	29350.	236.
380.00	.03203	.26989-2	30.847	111.	120.	119.9	33570.	30448.	239.
390.00	.03118	.26251-2	31.720	114.	122.	123.0	34780.	31572.	242.
400.00	.03037	.25555-2	32.590	116.	125.	126.2	36016.	32724.	245.
410.00	.02961	.24897-2	33.457	119.	128.	129.3	37278.	33901.	249.
420.00	.02888	.24273-2	34.322	121.	130.	132.4	38566.	35104.	251.
430.00	.02819	.23680-2	35.185	124.	133.	135.5	39879.	36333.	254.
440.00	.02754	.23118-2	36.046	127.	135.	138.6	41218.	37587.	257.
450.00	.02691	.22582-2	36.905	129.	138.	141.6	42582.	38866.	260.
460.00	.02631	.22071-2	37.762	131.	140.	144.7	43970.	40170.	263.
470.00	.02574	.21584-2	38.619	134.	142.	147.7	45382.	41498.	266.
480.00	.02519	.21118-2	39.473	136.	145.	150.7	46819.	42850.	269.
490.00	.02467	.20673-2	40.327	139.	147.	153.7	48279.	44225.	271.
500.00	.02417	.20246-2	41.179	141.	149.	156.7	49762.	45624.	274.
510.00	.02369	.19837-2	42.031	143.	152.	159.7	51268.	47046.	277.
520.00	.02322	.19445-2	42.881	145.	154.	162.7	52796.	48490.	279.
530.00	.02278	.19068-2	43.731	148.	156.	165.6	54347.	49957.	282.
540.00	.02235	.18706-2	44.579	150.	158.	168.6	55919.	51445.	285.
550.00	.02194	.18358-2	45.427	152.	160.	171.5	57513.	52955.	287.
560.00	.02154	.18022-2	46.274	154.	163.	174.4	59128.	54486.	290.
570.00	.02116	.17699-2	47.121	156.	165.	177.3	60763.	56038.	292.
580.00	.02079	.17388-2	47.967	158.	167.	180.2	62419.	57610.	295.
590.00	.02044	.17087-2	48.812	160.	169.	183.1	64095.	59202.	297.
600.00	.02009	.16797-2	49.656	162.	171.	185.9	65791.	60814.	300.
610.00	.01976	.16516-2	50.501	164.	172.	188.7	67506.	62445.	302.
620.00	.01944	.16245-2	51.344	166.	174.	191.6	69240.	64096.	305.
630.00	.01913	.15983-2	52.187	168.	176.	194.4	70993.	65765.	307.
640.00	.01882	.15729-2	53.030	170.	178.	197.2	72765.	67453.	309.
650.00	.01853	.15483-2	53.872	171.	180.	199.9	74554.	69159.	312.
660.00	.01825	.15245-2	54.714	173.	182.	202.7	76362.	70882.	314.
670.00	.01798	.15015-2	55.556	175.	183.	205.4	78187.	72624.	317.
680.00	.01771	.14791-2	56.397	177.	185.	208.2	80029.	74383.	319.
690.00	.01745	.14574-2	57.238	178.	187.	210.9	81889.	76158.	321.
700.00	.01720	.14363-2	58.078	180.	188.	213.6	83765.	77951.	323.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

1.01325 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV	CP	S*	H*	U	VEL SND M/SEC
				- - J/MOL /DEG K) - -			- - J/MOL	- -	
250.00	10.42399	7.4364	405.44	95.	126.	-5.7	-1457.	-1466.	963.
260.00	10.23772	6.9725	368.37	96.	129.	-.7	-180.	-190.	922.
261.39	10.21126	6.9073	363.20	96.	129.	.0	0.	-10.	916.
261.39	.04850	.41943-2	20.032	79.	89.	81.2	21233.	19144.	197.
270.00	.04677	.40276-2	20.869	81.	91.	84.1	22006.	19840.	200.
280.00	.04492	.38531-2	21.823	84.	93.	87.5	22927.	20672.	204.
290.00	.04323	.36957-2	22.762	87.	96.	90.8	23873.	21529.	208.
300.00	.04167	.35526-2	23.689	89.	98.	94.1	24845.	22413.	212.
310.00	.04022	.34217-2	24.605	92.	101.	97.4	25843.	23323.	216.
320.00	.03888	.33011-2	25.513	95.	104.	100.6	26866.	24260.	219.
330.00	.03763	.31896-2	26.413	97.	106.	103.9	27917.	25224.	223.
340.00	.03646	.30861-2	27.308	100.	109.	107.1	28994.	26215.	226.
350.00	.03537	.29897-2	28.197	103.	112.	110.3	30097.	27232.	230.
360.00	.03434	.28995-2	29.081	106.	114.	113.5	31228.	28277.	234.
370.00	.03337	.28150-2	29.961	108.	117.	116.6	32385.	29349.	236.
380.00	.03246	.27356-2	30.837	111.	120.	119.8	33568.	30447.	239.
390.00	.03160	.26607-2	31.711	114.	122.	122.9	34778.	31571.	242.
400.00	.03078	.25901-2	32.581	116.	125.	126.1	36014.	32723.	245.
410.00	.03001	.25233-2	33.449	119.	128.	129.2	37277.	33900.	248.
420.00	.02927	.24601-2	34.314	121.	130.	132.3	38565.	35103.	251.
430.00	.02857	.24000-2	35.177	124.	133.	135.4	39878.	36332.	254.
440.00	.02791	.23429-2	36.039	127.	135.	138.4	41217.	37586.	257.
450.00	.02727	.22886-2	36.898	129.	138.	141.5	42581.	38865.	260.
460.00	.02666	.22368-2	37.756	131.	140.	144.6	43969.	40169.	263.
470.00	.02608	.21874-2	38.612	134.	142.	147.6	45381.	41497.	266.
480.00	.02553	.21402-2	39.468	136.	145.	150.6	46818.	42849.	269.
490.00	.02500	.20950-2	40.321	139.	147.	153.6	48278.	44225.	271.
500.00	.02449	.20518-2	41.174	141.	149.	156.6	49761.	45623.	274.
510.00	.02400	.20103-2	42.026	143.	152.	159.6	51267.	47045.	277.
520.00	.02353	.19705-2	42.876	145.	154.	162.6	52795.	48490.	279.
530.00	.02308	.19324-2	43.726	148.	156.	165.5	54346.	49956.	282.
540.00	.02265	.18956-2	44.575	150.	158.	168.5	55918.	51445.	285.
550.00	.02223	.18603-2	45.423	152.	160.	171.4	57512.	52955.	287.
560.00	.02183	.18263-2	46.270	154.	163.	174.3	59127.	54485.	290.
570.00	.02144	.17936-2	47.117	156.	165.	177.2	60763.	56037.	292.
580.00	.02107	.17620-2	47.963	158.	167.	180.1	62419.	57609.	295.
590.00	.02071	.17315-2	48.809	160.	169.	182.9	64095.	59202.	297.
600.00	.02036	.17021-2	49.653	162.	171.	185.8	65790.	60813.	300.
610.00	.02002	.16737-2	50.498	164.	172.	188.6	67506.	62445.	302.
620.00	.01970	.16462-2	51.341	166.	174.	191.4	69240.	64095.	304.
630.00	.01938	.16196-2	52.185	168.	176.	194.3	70993.	65765.	307.
640.00	.01907	.15939-2	53.028	170.	178.	197.0	72764.	67452.	309.
650.00	.01878	.15690-2	53.870	171.	180.	199.8	74554.	69158.	312.
660.00	.01849	.15449-2	54.712	173.	182.	202.6	76361.	70882.	314.
670.00	.01821	.15215-2	55.554	175.	183.	205.3	78186.	72623.	317.
680.00	.01794	.14988-2	56.395	177.	185.	208.0	80029.	74382.	319.
690.00	.01768	.14768-2	57.236	178.	187.	210.8	81888.	76158.	321.
700.00	.01743	.14554-2	58.077	180.	188.	213.5	83764.	77950.	323.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

1.50 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV	CP	S*	H*	U	VEL SND M/SEC
				- - J/MOL /DEG K) - -			- - J/MOL - -		
250.00	10.42519	7.4457	406.19	95.	126.	-5.7	-1454.	-1468.	964.
260.00	10.23904	6.9812	369.09	96.	129.	-.7	-177.	-192.	923.
270.00	10.04655	6.5128	332.23	97.	132.	4.2	1125.	1110.	879.
271.89	10.00927	6.4240	325.31	98.	132.	5.1	1375.	1360.	870.
271.89	.06998	.61508-2	20.229	82.	93.	81.2	22058.	19914.	198.
280.00	.06762	.59081-2	21.064	84.	94.	84.0	22815.	20597.	202.
290.00	.06494	.56411-2	22.070	87.	97.	87.3	23770.	21460.	206.
300.00	.06249	.54029-2	23.053	89.	99.	90.6	24750.	22349.	210.
310.00	.06024	.51882-2	24.018	92.	102.	93.9	25754.	23264.	214.
320.00	.05817	.49930-2	24.968	95.	104.	97.2	26784.	24205.	217.
330.00	.05624	.48143-2	25.907	98.	107.	100.4	27839.	25172.	221.
340.00	.05444	.46498-2	26.834	100.	109.	103.7	28921.	26166.	225.
350.00	.05277	.44976-2	27.754	103.	112.	106.9	30029.	27186.	228.
360.00	.05120	.43562-2	28.665	106.	115.	110.1	31163.	28233.	231.
370.00	.04973	.42243-2	29.570	108.	117.	113.2	32323.	29307.	235.
380.00	.04834	.41009-2	30.469	111.	120.	116.4	33510.	30407.	238.
390.00	.04703	.39851-2	31.363	114.	123.	119.6	34723.	31534.	241.
400.00	.04580	.38762-2	32.253	116.	125.	122.7	35962.	32686.	244.
410.00	.04463	.37735-2	33.139	119.	128.	125.8	37227.	33865.	247.
420.00	.04352	.36765-2	34.021	121.	130.	128.9	38517.	35070.	251.
430.00	.04246	.35846-2	34.900	124.	133.	132.0	39832.	36300.	254.
440.00	.04146	.34975-2	35.776	127.	135.	135.1	41173.	37555.	257.
450.00	.04051	.34147-2	36.649	129.	138.	138.2	42539.	38835.	259.
460.00	.03960	.33360-2	37.520	132.	140.	141.2	43928.	40140.	262.
470.00	.03873	.32609-2	38.388	134.	143.	144.3	45343.	41469.	265.
480.00	.03790	.31893-2	39.255	136.	145.	147.3	46780.	42822.	268.
490.00	.03710	.31210-2	40.120	139.	147.	150.3	48242.	44199.	271.
500.00	.03634	.30556-2	40.983	141.	150.	153.3	49726.	45599.	274.
510.00	.03561	.29929-2	41.844	143.	152.	156.3	51233.	47021.	276.
520.00	.03491	.29329-2	42.704	145.	154.	159.3	52763.	48466.	279.
530.00	.03424	.28753-2	43.563	148.	156.	162.2	54315.	49933.	282.
540.00	.03359	.28201-2	44.420	150.	158.	165.2	55888.	51423.	284.
550.00	.03297	.27669-2	45.276	152.	161.	168.1	57483.	52933.	287.
560.00	.03237	.27158-2	46.131	154.	163.	171.0	59099.	54464.	289.
570.00	.03179	.26666-2	46.985	156.	165.	173.9	60736.	56017.	292.
580.00	.03123	.26191-2	47.838	158.	167.	176.8	62392.	57589.	295.
590.00	.03069	.25734-2	48.690	160.	169.	179.6	64069.	59182.	297.
600.00	.03017	.25293-2	49.542	162.	171.	182.5	65766.	60795.	300.
610.00	.02967	.24867-2	50.392	164.	173.	185.3	67482.	62426.	302.
620.00	.02919	.24455-2	51.242	166.	174.	188.2	69217.	64077.	304.
630.00	.02872	.24057-2	52.091	168.	176.	191.0	70970.	65747.	307.
640.00	.02826	.23672-2	52.939	170.	178.	193.8	72743.	67435.	309.
650.00	.02782	.23299-2	53.787	171.	180.	196.5	74533.	69141.	312.
660.00	.02740	.22939-2	54.634	173.	182.	199.3	76341.	70865.	314.
670.00	.02698	.22589-2	55.481	175.	183.	202.0	78167.	72607.	316.
680.00	.02658	.22250-2	56.327	177.	185.	204.8	80009.	74366.	319.
690.00	.02619	.21921-2	57.172	178.	187.	207.5	81869.	76142.	321.
700.00	.02581	.21602-2	58.017	180.	188.	210.2	83746.	77935.	323.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

2.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV	CP	S*	H*	U	VEL SND M/SEC
				- - J/MOL /DEG K) - -			- - J/MOL	- -	
250.00	10.42642	7.4554	406.97	95.	126.	-5.7	-1451.	-1470.	965.
260.00	10.24040	6.9902	369.83	96.	129.	-.7	-175.	-194.	924.
270.00	10.04805	6.5214	332.94	97.	132.	4.2	1127.	1107.	880.
280.00	9.84825	6.0528	296.78	99.	135.	9.0	2458.	2438.	833.
280.22	9.84378	6.0426	295.99	99.	135.	9.1	2487.	2467.	832.
280.22	.09174	.81877-2	20.264	85.	96.	81.3	22712.	20532.	198.
290.00	.08798	.77823-2	21.326	87.	98.	84.6	23658.	21385.	203.
300.00	.08451	.74203-2	22.376	90.	100.	88.0	24647.	22281.	207.
310.00	.08133	.70999-2	23.397	92.	102.	91.3	25660.	23201.	211.
320.00	.07842	.68128-2	24.395	95.	105.	94.6	26696.	24146.	215.
330.00	.07574	.65532-2	25.375	98.	107.	97.9	27758.	25117.	219.
340.00	.07325	.63165-2	26.340	100.	110.	101.1	28845.	26114.	223.
350.00	.07094	.60993-2	27.292	103.	113.	104.3	29957.	27138.	226.
360.00	.06877	.58988-2	28.233	106.	115.	107.5	31096.	28187.	230.
370.00	.06675	.57129-2	29.165	108.	118.	110.7	32260.	29263.	233.
380.00	.06485	.55399-2	30.088	111.	120.	113.9	33450.	30366.	237.
390.00	.06307	.53782-2	31.004	114.	123.	117.1	34666.	31494.	240.
400.00	.06138	.52267-2	31.915	116.	125.	120.2	35907.	32649.	243.
410.00	.05979	.50843-2	32.819	119.	128.	123.3	37175.	33829.	246.
420.00	.05828	.49501-2	33.719	122.	131.	126.5	38467.	35035.	250.
430.00	.05685	.48234-2	34.614	124.	133.	129.6	39785.	36267.	253.
440.00	.05549	.47036-2	35.505	127.	136.	132.6	41128.	37524.	256.
450.00	.05420	.45899-2	36.393	129.	138.	135.7	42495.	38805.	259.
460.00	.05297	.44820-2	37.277	132.	140.	138.8	43887.	40111.	262.
470.00	.05179	.43793-2	38.158	134.	143.	141.8	45303.	41441.	265.
480.00	.05067	.42815-2	39.037	136.	145.	144.9	46742.	42795.	267.
490.00	.04960	.41882-2	39.912	139.	147.	147.9	48205.	44172.	270.
500.00	.04857	.40991-2	40.786	141.	150.	150.9	49691.	45573.	273.
510.00	.04759	.40139-2	41.658	143.	152.	153.9	51199.	46996.	276.
520.00	.04664	.39323-2	42.527	146.	154.	156.8	52730.	48442.	278.
530.00	.04574	.38541-2	43.395	148.	156.	159.8	54283.	49910.	281.
540.00	.04486	.37790-2	44.261	150.	159.	162.7	55858.	51400.	284.
550.00	.04403	.37070-2	45.125	152.	161.	165.7	57453.	52911.	286.
560.00	.04322	.36377-2	45.988	154.	163.	168.6	59070.	54443.	289.
570.00	.04244	.35711-2	46.850	156.	165.	171.5	60708.	55996.	292.
580.00	.04170	.35069-2	47.710	158.	167.	174.4	62366.	57569.	294.
590.00	.04097	.34451-2	48.569	160.	169.	177.2	64043.	59162.	297.
600.00	.04028	.33855-2	49.427	162.	171.	180.1	65741.	60775.	299.
610.00	.03960	.33279-2	50.284	164.	173.	182.9	67457.	62407.	302.
620.00	.03895	.32724-2	51.139	166.	175.	185.7	69193.	64059.	304.
630.00	.03832	.32187-2	51.994	168.	176.	188.5	70947.	65729.	307.
640.00	.03771	.31667-2	52.848	170.	178.	191.3	72720.	67417.	309.
650.00	.03712	.31165-2	53.702	171.	180.	194.1	74511.	69124.	311.
660.00	.03655	.30679-2	54.554	173.	182.	196.9	76320.	70848.	314.
670.00	.03600	.30208-2	55.406	175.	183.	199.6	78146.	72591.	316.
680.00	.03546	.29751-2	56.257	177.	185.	202.3	79990.	74350.	319.
690.00	.03494	.29309-2	57.107	178.	187.	205.1	81850.	76126.	321.
700.00	.03444	.28879-2	57.956	180.	189.	207.8	83727.	77919.	323.

H* = H(T) - H(N,P,T,LIQUID) AND
S* = S(T) - S(N,P,T,LIQUID)

2.50 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV - - J/MOL /DEG K) - -	CP	S*	H* - - J/MOL - -	U	VEL SND M/SEC
250.00	10.42765	7.4650	407.74	95.	126.	-5.7	-1449.	-1472.	966.
260.00	10.24175	6.9992	370.57	96.	129.	-.7	-172.	-197.	925.
270.00	10.04955	6.5299	333.66	97.	132.	4.2	1130.	1105.	881.
280.00	9.84993	6.0611	297.48	99.	135.	9.0	2460.	2435.	834.
287.08	9.70345	5.7311	272.48	100.	137.	12.4	3421.	3395.	800.
287.08	.11333	.010262	20.207	87.	98.	81.5	23251.	21045.	199.
290.00	.11187	.010094	20.545	88.	99.	82.5	23540.	21305.	200.
300.00	.10721	.95737-2	21.671	90.	101.	85.9	24540.	22208.	205.
310.00	.10300	.91223-2	22.755	93.	103.	89.2	25561.	23134.	209.
320.00	.09917	.87245-2	23.807	95.	106.	92.6	26606.	24085.	213.
330.00	.09566	.83694-2	24.833	98.	108.	95.8	27674.	25060.	217.
340.00	.09242	.80492-2	25.837	101.	110.	99.1	28767.	26061.	221.
350.00	.08941	.77579-2	26.824	103.	113.	102.3	29884.	27088.	225.
360.00	.08662	.74910-2	27.795	106.	116.	105.6	31027.	28141.	228.
370.00	.08402	.72451-2	28.755	109.	118.	108.8	32195.	29219.	232.
380.00	.08158	.70175-2	29.704	111.	121.	111.9	33389.	30324.	235.
390.00	.07929	.68057-2	30.643	114.	123.	115.1	34608.	31455.	239.
400.00	.07713	.66080-2	31.574	116.	126.	118.3	35852.	32611.	242.
410.00	.07510	.64228-2	32.498	119.	128.	121.4	37122.	33793.	245.
420.00	.07317	.62489-2	33.415	122.	131.	124.5	38417.	35001.	249.
430.00	.07135	.60851-2	34.327	124.	133.	127.6	39737.	36234.	252.
440.00	.06963	.59304-2	35.234	127.	136.	130.7	41082.	37492.	255.
450.00	.06799	.57841-2	36.136	129.	138.	133.8	42451.	38774.	258.
460.00	.06642	.56455-2	37.033	132.	141.	136.9	43845.	40081.	261.
470.00	.06493	.55138-2	37.927	134.	143.	139.9	45262.	41412.	264.
480.00	.06351	.53885-2	38.818	136.	145.	142.9	46703.	42767.	267.
490.00	.06216	.52692-2	39.705	139.	148.	146.0	48168.	44146.	270.
500.00	.06086	.51553-2	40.589	141.	150.	149.0	49655.	45547.	272.
510.00	.05962	.50466-2	41.471	143.	152.	152.0	51165.	46971.	275.
520.00	.05842	.49426-2	42.350	146.	154.	154.9	52697.	48418.	278.
530.00	.05728	.48430-2	43.227	148.	156.	157.9	54251.	49887.	281.
540.00	.05618	.47476-2	44.102	150.	159.	160.8	55827.	51377.	283.
550.00	.05513	.46560-2	44.974	152.	161.	163.8	57424.	52889.	286.
560.00	.05411	.45680-2	45.845	154.	163.	166.7	59041.	54421.	289.
570.00	.05313	.44835-2	46.714	156.	165.	169.6	60680.	55975.	291.
580.00	.05219	.44021-2	47.582	158.	167.	172.5	62339.	57548.	294.
590.00	.05128	.43237-2	48.448	160.	169.	175.3	64017.	59142.	296.
600.00	.05040	.42482-2	49.312	162.	171.	178.2	65715.	60756.	299.
610.00	.04956	.41754-2	50.175	164.	173.	181.0	67433.	62388.	301.
620.00	.04874	.41051-2	51.037	166.	175.	183.8	69169.	64040.	304.
630.00	.04795	.40372-2	51.898	168.	176.	186.7	70924.	65711.	306.
640.00	.04718	.39715-2	52.758	170.	178.	189.4	72698.	67399.	309.
650.00	.04644	.39081-2	53.616	171.	180.	192.2	74489.	69107.	311.
660.00	.04573	.38466-2	54.474	173.	182.	195.0	76299.	70831.	314.
670.00	.04503	.37872-2	55.331	175.	184.	197.7	78126.	72574.	316.
680.00	.04436	.37296-2	56.187	177.	185.	200.5	79970.	74334.	318.
690.00	.04370	.36737-2	57.042	178.	187.	203.2	81831.	76110.	321.
700.00	.04307	.36196-2	57.896	180.	189.	205.9	83709.	77904.	323.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

3.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV	CP	S*	H*	U	VEL SND
				- - J/MOL /DEG K) - -			- - J/MOL	- -	M/SEC
250.00	10.42887	7.4746	408.51	95.	126.	-5.7	-1446.	-1475.	967.
260.00	10.24310	7.0082	371.31	96.	129.	-.7	-170.	-199.	926.
270.00	10.05105	6.5384	334.38	97.	132.	4.2	1132.	1102.	882.
280.00	9.85161	6.0693	298.18	99.	135.	9.0	2462.	2432.	835.
290.00	9.64345	5.6036	263.02	101.	138.	13.8	3824.	3793.	787.
292.96	9.57991	5.4666	252.84	101.	139.	15.2	4234.	4203.	773.
292.96	.13484	.012380	20.090	89.	101.	81.7	23712.	21487.	198.
300.00	.13068	.011884	20.937	90.	102.	84.1	24427.	22131.	202.
310.00	.12530	.011270	22.093	93.	104.	87.5	25459.	23065.	207.
320.00	.12044	.010738	23.203	95.	106.	90.8	26512.	24021.	211.
330.00	.11602	.010270	24.278	98.	109.	94.1	27588.	25002.	215.
340.00	.11196	.98530-2	25.324	101.	111.	97.4	28687.	26007.	219.
350.00	.10822	.94772-2	26.348	103.	114.	100.7	29809.	27037.	223.
360.00	.10476	.91357-2	27.353	106.	116.	103.9	30957.	28093.	227.
370.00	.10153	.88231-2	28.341	109.	118.	107.1	32129.	29174.	231.
380.00	.09852	.85353-2	29.316	111.	121.	110.3	33327.	30282.	234.
390.00	.09570	.82688-2	30.279	114.	124.	113.5	34549.	31414.	238.
400.00	.09305	.80211-2	31.231	116.	126.	116.6	35797.	32573.	241.
410.00	.09056	.77899-2	32.175	119.	129.	119.8	37069.	33757.	244.
420.00	.08821	.75734-2	33.111	122.	131.	122.9	38367.	34966.	248.
430.00	.08598	.73700-2	34.039	124.	133.	126.0	39689.	36200.	251.
440.00	.08387	.71785-2	34.961	127.	136.	129.1	41036.	37459.	254.
450.00	.08187	.69977-2	35.878	129.	138.	132.2	42408.	38743.	257.
460.00	.07997	.68266-2	36.789	132.	141.	135.3	43803.	40051.	260.
470.00	.07816	.66645-2	37.696	134.	143.	138.3	45222.	41384.	263.
480.00	.07643	.65105-2	38.599	136.	145.	141.4	46665.	42740.	266.
490.00	.07478	.63640-2	39.497	139.	148.	144.4	48130.	44119.	269.
500.00	.07321	.62244-2	40.392	141.	150.	147.4	49619.	45521.	272.
510.00	.07170	.60912-2	41.284	143.	152.	150.4	51130.	46946.	275.
520.00	.07025	.59640-2	42.173	146.	154.	153.4	52664.	48394.	277.
530.00	.06887	.58423-2	43.059	148.	157.	156.3	54219.	49863.	280.
540.00	.06754	.57258-2	43.942	150.	159.	159.3	55796.	51354.	283.
550.00	.06626	.56140-2	44.823	152.	161.	162.2	57394.	52866.	286.
560.00	.06503	.55068-2	45.702	154.	163.	165.1	59013.	54400.	288.
570.00	.06385	.54038-2	46.579	156.	165.	168.0	60652.	55954.	291.
580.00	.06271	.53047-2	47.453	158.	167.	170.9	62312.	57528.	294.
590.00	.06161	.52094-2	48.326	160.	169.	173.8	63991.	59122.	296.
600.00	.06056	.51175-2	49.198	162.	171.	176.6	65690.	60736.	299.
610.00	.05953	.50290-2	50.067	164.	173.	179.5	67408.	62369.	301.
620.00	.05855	.49436-2	50.935	166.	175.	182.3	69146.	64021.	304.
630.00	.05759	.48612-2	51.802	168.	177.	185.1	70901.	65692.	306.
640.00	.05667	.47816-2	52.667	170.	178.	187.9	72676.	67382.	309.
650.00	.05578	.47046-2	53.531	171.	180.	190.7	74468.	69089.	311.
660.00	.05491	.46301-2	54.394	173.	182.	193.4	76278.	70814.	313.
670.00	.05407	.45581-2	55.256	175.	184.	196.2	78105.	72557.	316.
680.00	.05326	.44883-2	56.117	177.	185.	198.9	79950.	74317.	318.
690.00	.05247	.44206-2	56.976	178.	187.	201.6	81812.	76094.	321.
700.00	.05171	.43551-2	57.835	180.	189.	204.3	83690.	77888.	323.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

3.50 BAR ISOBAR

T	DENSITY	DP/DT	DP/DD	CV	CP	S*	H*	U	VEL SND
DEG K	MOL/DM3	BAR/K	BAR/(MOL/DM3)	- - J/MOL /DEG K) - -			- - J/MOL	- -	M/SEC
250.00	10.43009	7.4841	409.28	95.	126.	-5.7	-1443.	-1477.	968.
260.00	10.24444	7.0171	372.05	96.	129.	-.7	-167.	-201.	927.
270.00	10.05254	6.5469	335.09	97.	132.	4.2	1134.	1099.	883.
280.00	9.85329	6.0775	298.87	99.	135.	9.0	2464.	2429.	836.
290.00	9.64535	5.6117	263.71	101.	138.	13.8	3826.	3790.	788.
298.14	9.46843	5.2361	235.98	102.	141.	17.7	4961.	4924.	748.
298.14	.15634	.014545	19.934	90.	103.	81.9	24116.	21877.	198.
300.00	.15500	.014376	20.172	91.	104.	82.5	24308.	22050.	199.
310.00	.14829	.013559	21.407	93.	105.	86.0	25352.	22992.	204.
320.00	.14228	.012865	22.582	96.	107.	89.3	26415.	23955.	209.
330.00	.13686	.012263	23.710	98.	109.	92.7	27499.	24941.	213.
340.00	.13191	.011734	24.803	101.	112.	96.0	28604.	25951.	217.
350.00	.12737	.011261	25.866	103.	114.	99.2	29733.	26985.	221.
360.00	.12319	.010836	26.904	106.	116.	102.5	30886.	28044.	225.
370.00	.11930	.010449	27.923	109.	119.	105.7	32062.	29129.	229.
380.00	.11569	.010095	28.925	111.	121.	108.9	33264.	30238.	233.
390.00	.11232	.97689-2	29.912	114.	124.	112.1	34490.	31373.	236.
400.00	.10915	.94670-2	30.887	117.	126.	115.3	35741.	32534.	240.
410.00	.10618	.91863-2	31.851	119.	129.	118.4	37016.	33720.	243.
420.00	.10338	.89242-2	32.805	122.	131.	121.6	38316.	34931.	247.
430.00	.10073	.86788-2	33.750	124.	134.	124.7	39641.	36166.	250.
440.00	.09823	.84482-2	34.689	127.	136.	127.8	40990.	37427.	253.
450.00	.09586	.82309-2	35.620	129.	139.	130.9	42363.	38712.	256.
460.00	.09361	.80258-2	36.545	132.	141.	133.9	43761.	40022.	259.
470.00	.09146	.78317-2	37.465	134.	143.	137.0	45182.	41355.	262.
480.00	.08942	.76476-2	38.379	136.	146.	140.0	46626.	42712.	265.
490.00	.08748	.74728-2	39.290	139.	148.	143.1	48093.	44092.	268.
500.00	.08562	.73064-2	40.195	141.	150.	146.1	49583.	45495.	271.
510.00	.08384	.71479-2	41.097	143.	152.	149.1	51096.	46921.	274.
520.00	.08214	.69966-2	41.996	146.	155.	152.0	52630.	48369.	277.
530.00	.08050	.68520-2	42.891	148.	157.	155.0	54187.	49839.	280.
540.00	.07894	.67137-2	43.783	150.	159.	157.9	55765.	51331.	283.
550.00	.07744	.65811-2	44.673	152.	161.	160.9	57364.	52844.	285.
560.00	.07599	.64540-2	45.559	154.	163.	163.8	58984.	54378.	288.
570.00	.07460	.63320-2	46.443	156.	165.	166.7	60624.	55932.	291.
580.00	.07326	.62148-2	47.325	158.	167.	169.6	62285.	57507.	293.
590.00	.07197	.61021-2	48.205	160.	169.	172.5	63965.	59102.	296.
600.00	.07073	.59935-2	49.083	162.	171.	175.3	65665.	60716.	298.
610.00	.06953	.58890-2	49.959	164.	173.	178.2	67384.	62350.	301.
620.00	.06837	.57881-2	50.833	166.	175.	181.0	69122.	64003.	303.
630.00	.06725	.56908-2	51.706	168.	177.	183.8	70878.	65674.	306.
640.00	.06617	.55969-2	52.577	170.	178.	186.6	72653.	67364.	308.
650.00	.06512	.55061-2	53.446	171.	180.	189.4	74446.	69072.	311.
660.00	.06411	.54184-2	54.314	173.	182.	192.1	76257.	70797.	313.
670.00	.06313	.53335-2	55.181	175.	184.	194.9	78085.	72540.	316.
680.00	.06218	.52513-2	56.047	177.	185.	197.6	79930.	74301.	318.
690.00	.06125	.51716-2	56.911	178.	187.	200.3	81792.	76078.	320.
700.00	.06036	.50945-2	57.775	180.	189.	203.0	83671.	77872.	323.

H* = H(T) - H(N,R,T,LIQUID) AND
S* = S(T) - S(N,R,T,LIQUID)

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV	CP	S*	H*	U	VEL SND M/SEC
				- - J/MOL	/DEG K)	- -	- - J/MOL	- -	
250.00	10.43131	7.4937	410.05	95.	126.	-5.7	-1440.	-1479.	969.
260.00	10.24578	7.0261	372.79	96.	129.	-.7	-165.	-204.	928.
270.00	10.05403	6.5554	335.81	97.	132.	4.2	1137.	1097.	884.
280.00	9.85496	6.0858	299.57	99.	134.	9.0	2466.	2426.	837.
290.00	9.64724	5.6198	264.39	101.	138.	13.8	3828.	3786.	789.
300.00	9.42922	5.1591	230.47	103.	142.	18.5	5225.	5182.	740.
302.80	9.36604	5.0309	221.19	103.	143.	19.8	5623.	5581.	725.

SYSTEM WARNING - MAX PAGES

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV	CP	S*	H*	U	VEL SND M/SEC
302.80	.17787	.016758	19.750	92.	106.	82.1	24477.	22228.	198.
310.00	.17204	.016008	20.695	94.	107.	84.6	25240.	22915.	201.
320.00	.16474	.015117	21.942	96.	108.	88.0	26314.	23886.	206.
330.00	.15821	.014357	23.129	99.	110.	91.4	27407.	24879.	211.
340.00	.15229	.013697	24.271	101.	112.	94.7	28520.	25894.	215.
350.00	.14689	.013115	25.375	104.	115.	98.0	29655.	26932.	220.
360.00	.14193	.012595	26.450	106.	117.	101.2	30813.	27995.	224.
370.00	.13735	.012126	27.500	109.	119.	104.5	31995.	29082.	228.
380.00	.13310	.011699	28.530	111.	122.	107.7	33200.	30195.	232.
390.00	.12913	.011307	29.543	114.	124.	110.9	34430.	31332.	235.
400.00	.12543	.010947	30.540	117.	127.	114.1	35684.	32495.	239.
410.00	.12196	.010613	31.524	119.	129.	117.2	36962.	33682.	242.
420.00	.11869	.010302	32.498	122.	132.	120.4	38265.	34895.	245.
430.00	.11561	.010012	33.461	124.	134.	123.5	39592.	36133.	249.
440.00	.11270	.97398-2	34.415	127.	136.	126.6	40944.	37395.	252.
450.00	.10995	.94842-2	35.361	129.	139.	129.7	42319.	38681.	256.
460.00	.10733	.92433-2	36.300	132.	141.	132.8	43718.	39992.	259.
470.00	.10485	.90157-2	37.233	134.	143.	135.8	45141.	41326.	262.
480.00	.10249	.88002-2	38.160	136.	146.	138.9	46587.	42684.	265.
490.00	.10023	.85958-2	39.082	139.	148.	141.9	48056.	44065.	268.
500.00	.09809	.84016-2	39.998	141.	150.	144.9	49547.	45469.	271.
510.00	.09603	.82167-2	40.911	143.	152.	147.9	51061.	46896.	274.
520.00	.09407	.80404-2	41.819	146.	155.	150.9	52597.	48345.	276.
530.00	.09218	.78722-2	42.723	148.	157.	153.8	54155.	49816.	279.
540.00	.09038	.77113-2	43.624	150.	159.	156.8	55734.	51308.	282.
550.00	.08865	.75574-2	44.522	152.	161.	159.7	57334.	52822.	285.
560.00	.08698	.74098-2	45.416	154.	163.	162.7	58955.	54356.	288.
570.00	.08538	.72683-2	46.308	156.	165.	165.6	60596.	55911.	290.
580.00	.08384	.71324-2	47.198	158.	167.	168.4	62258.	57487.	293.
590.00	.08236	.70018-2	48.084	160.	169.	171.3	63939.	59082.	295.
600.00	.08093	.68762-2	48.969	162.	171.	174.2	65639.	60697.	298.
610.00	.07955	.67551-2	49.851	164.	173.	177.0	67359.	62331.	301.
620.00	.07822	.66385-2	50.732	166.	175.	179.8	69098.	63984.	303.
630.00	.07693	.65261-2	51.610	168.	177.	182.7	70855.	65656.	306.
640.00	.07569	.64175-2	52.487	170.	178.	185.5	72631.	67346.	308.
650.00	.07449	.63127-2	53.362	171.	180.	188.2	74424.	69054.	311.
660.00	.07332	.62114-2	54.235	173.	182.	191.0	76236.	70780.	313.
670.00	.07220	.61134-2	55.107	175.	184.	193.8	78064.	72524.	315.
680.00	.07110	.60185-2	55.977	177.	185.	196.5	79910.	74285.	318.
690.00	.07004	.59267-2	56.846	178.	187.	199.2	81773.	76062.	320.
700.00	.06902	.58377-2	57.714	180.	189.	201.9	83652.	77857.	323.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

4.50 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV	CP	S*	H*	U	VEL SND M/SEC
				- - J/MOL /DEG K) - -			- - J/MOL	- -	
250.00	10.43253	7.5032	410.82	95.	126.	-5.8	-1438.	-1481.	970.
260.00	10.24712	7.0350	373.52	96.	129.	-.8	-162.	-206.	929.
270.00	10.05552	6.5639	336.52	97.	131.	4.2	1139.	1094.	885.
280.00	9.85662	6.0939	300.27	99.	134.	9.0	2469.	2423.	838.
290.00	9.64913	5.6278	265.08	101.	138.	13.8	3830.	3783.	790.
300.00	9.43139	5.1671	231.15	103.	142.	18.5	5226.	5179.	741.
307.03	9.27100	4.8469	208.10	104.	145.	21.8	6232.	6183.	705.
307.03	.19947	.019022	19.545	93.	108.	82.3	24803.	22547.	197.
310.00	.19664	.018641	19.956	94.	108.	83.3	25123.	22835.	199.
320.00	.18788	.017510	21.283	96.	109.	86.8	26210.	23815.	204.
330.00	.18011	.016563	22.534	99.	111.	90.2	27312.	24814.	209.
340.00	.17312	.015751	23.728	101.	113.	93.5	28434.	25834.	214.
350.00	.16679	.015043	24.877	104.	115.	96.8	29576.	26878.	218.
360.00	.16100	.014416	25.990	106.	117.	100.1	30739.	27944.	222.
370.00	.15567	.013855	27.073	109.	120.	103.4	31926.	29035.	226.
380.00	.15074	.013348	28.132	112.	122.	106.6	33135.	30150.	230.
390.00	.14617	.012886	29.170	114.	125.	109.8	34369.	31290.	234.
400.00	.14190	.012462	30.191	117.	127.	113.0	35626.	32455.	238.
410.00	.13790	.012071	31.197	119.	129.	116.1	36908.	33645.	241.
420.00	.13415	.011708	32.189	122.	132.	119.3	38214.	34859.	245.
430.00	.13062	.011370	33.170	124.	134.	122.4	39543.	36098.	248.
440.00	.12729	.011054	34.140	127.	137.	125.5	40897.	37362.	251.
450.00	.12414	.010758	35.102	129.	139.	128.6	42275.	38650.	255.
460.00	.12115	.010479	36.055	132.	141.	131.7	43676.	39961.	258.
470.00	.11832	.010217	37.001	134.	144.	134.8	45100.	41297.	261.
480.00	.11563	.99683-2	37.940	137.	146.	137.8	46548.	42656.	264.
490.00	.11306	.97331-2	38.874	139.	148.	140.9	48018.	44038.	267.
500.00	.11062	.95099-2	39.801	141.	150.	143.9	49511.	45443.	270.
510.00	.10828	.92977-2	40.724	143.	153.	146.9	51026.	46871.	273.
520.00	.10605	.90956-2	41.642	146.	155.	149.9	52564.	48320.	276.
530.00	.10391	.89029-2	42.555	148.	157.	152.8	54122.	49792.	279.
540.00	.10186	.87188-2	43.465	150.	159.	155.8	55703.	51285.	282.
550.00	.09990	.85428-2	44.371	152.	161.	158.7	57304.	52799.	284.
560.00	.09801	.83742-2	45.274	154.	163.	161.6	58926.	54334.	287.
570.00	.09620	.82126-2	46.173	156.	165.	164.5	60568.	55890.	290.
580.00	.09445	.80576-2	47.070	158.	167.	167.4	62230.	57466.	293.
590.00	.09277	.79087-2	47.964	160.	169.	170.3	63913.	59062.	295.
600.00	.09115	.77655-2	48.855	162.	171.	173.2	65614.	60677.	298.
610.00	.08959	.76276-2	49.743	164.	173.	176.0	67335.	62312.	300.
620.00	.08808	.74949-2	50.630	166.	175.	178.8	69074.	63965.	303.
630.00	.08663	.73669-2	51.514	168.	177.	181.7	70832.	65638.	305.
640.00	.08522	.72435-2	52.396	170.	179.	184.5	72608.	67328.	308.
650.00	.08386	.71243-2	53.277	172.	180.	187.2	74403.	69037.	310.
660.00	.08255	.70091-2	54.156	173.	182.	190.0	76215.	70763.	313.
670.00	.08127	.68978-2	55.032	175.	184.	192.7	78044.	72507.	315.
680.00	.08004	.67901-2	55.908	177.	185.	195.5	79890.	74268.	318.
690.00	.07884	.66858-2	56.782	178.	187.	198.2	81754.	76046.	320.
700.00	.07769	.65848-2	57.654	180.	189.	200.9	83634.	77841.	322.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

5.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV	CP	S*	H*	U	VEL SND
				- - J/MOL /DEG K) - -			- - J/MOL	- -	M/SEC
250.00	10.43375	7.5127	411.59	95.	126.	-5.8	-1435.	-1483.	971.
260.00	10.24846	7.0439	374.26	96.	129.	-.8	-160.	-208.	930.
270.00	10.05700	6.5723	337.23	97.	131.	4.1	1141.	1092.	886.
280.00	9.85829	6.1021	300.96	99.	134.	9.0	2471.	2420.	839.
290.00	9.65102	5.6358	265.77	101.	138.	13.8	3832.	3780.	791.
300.00	9.43355	5.1751	231.83	103.	142.	18.5	5228.	5175.	742.
310.00	9.20372	4.7205	199.25	105.	146.	23.2	6664.	6610.	690.
310.93	9.18162	4.6785	196.29	105.	146.	23.6	6800.	6745.	686.
310.93	.22115	.021338	19.323	95.	110.	82.5	25102.	22841.	196.
320.00	.21175	.020061	20.602	97.	111.	85.7	26101.	23739.	201.
330.00	.20260	.018891	21.923	99.	112.	89.1	27214.	24747.	207.
340.00	.19444	.017902	23.174	102.	114.	92.5	28345.	25773.	212.
350.00	.18709	.017050	24.370	104.	116.	95.8	29494.	26822.	216.
360.00	.18041	.016304	25.523	107.	118.	99.1	30664.	27892.	221.
370.00	.17429	.015641	26.641	109.	120.	102.4	31856.	28987.	225.
380.00	.16865	.015045	27.730	112.	123.	105.6	33070.	30105.	229.
390.00	.16342	.014506	28.795	114.	125.	108.8	34307.	31248.	233.
400.00	.15856	.014013	29.840	117.	127.	112.0	35568.	32415.	237.
410.00	.15401	.013560	30.867	119.	130.	115.2	36853.	33607.	240.
420.00	.14976	.013142	31.879	122.	132.	118.3	38162.	34823.	244.
430.00	.14576	.012753	32.878	124.	134.	121.5	39494.	36064.	247.
440.00	.14199	.012391	33.865	127.	137.	124.6	40850.	37329.	251.
450.00	.13844	.012052	34.842	129.	139.	127.7	42230.	38618.	254.
460.00	.13507	.011734	35.810	132.	141.	130.8	43633.	39931.	257.
470.00	.13188	.011435	36.769	134.	144.	133.8	45059.	41268.	260.
480.00	.12884	.011152	37.720	137.	146.	136.9	46508.	42628.	263.
490.00	.12596	.010885	38.665	139.	148.	139.9	47980.	44011.	267.
500.00	.12321	.010632	39.604	141.	151.	142.9	49475.	45417.	270.
510.00	.12059	.010391	40.537	143.	153.	145.9	50992.	46845.	273.
520.00	.11808	.010162	41.465	146.	155.	148.9	52530.	48296.	275.
530.00	.11568	.99442-2	42.388	148.	157.	151.9	54090.	49768.	278.
540.00	.11339	.97362-2	43.306	150.	159.	154.9	55672.	51262.	281.
550.00	.11118	.95374-2	44.221	152.	161.	157.8	57274.	52777.	284.
560.00	.10907	.93472-2	45.131	154.	163.	160.7	58897.	54313.	287.
570.00	.10704	.91651-2	46.038	156.	165.	163.6	60540.	55869.	289.
580.00	.10509	.89903-2	46.942	158.	167.	166.5	62203.	57445.	292.
590.00	.10321	.88226-2	47.843	160.	169.	169.4	63886.	59042.	295.
600.00	.10140	.86615-2	48.741	162.	171.	172.3	65589.	60658.	297.
610.00	.09965	.85064-2	49.636	164.	173.	175.1	67310.	62293.	300.
620.00	.09797	.83572-2	50.528	166.	175.	177.9	69050.	63947.	303.
630.00	.09634	.82134-2	51.419	168.	177.	180.7	70809.	65619.	305.
640.00	.09477	.80747-2	52.307	170.	179.	183.5	72586.	67310.	308.
650.00	.09326	.79409-2	53.192	172.	180.	186.3	74381.	69019.	310.
660.00	.09179	.78116-2	54.076	173.	182.	189.1	76193.	70746.	313.
670.00	.09037	.76867-2	54.958	175.	184.	191.8	78023.	72490.	315.
680.00	.08899	.75659-2	55.838	177.	186.	194.6	79870.	74252.	318.
690.00	.08766	.74490-2	56.717	178.	187.	197.3	81734.	76030.	320.
700.00	.08636	.73359-2	57.594	180.	189.	200.0	83615.	77825.	322.

H* = H(T) - H(N.B.T.LIQUID) AND
S* = S(T) - S(N.B.T.LIQUID)

6.00 BAR ISOBAR

T	DENSITY	DP/DT	DP/DD	CV	CP	S*	H*	U	VEL SND
DEG K	MOL/DM3	BAR/K	BAR/(MOL/DM3)	- - J/MOL /DEG K) - -			- - J/MOL	- -	M/SEC
250.00	10.43617	7.5317	413.13	95.	126.	-5.8	-1430.	-1487.	973.
260.00	10.25113	7.0616	375.73	96.	129.	-.8	-155.	-213.	932.
270.00	10.05996	6.5892	338.66	97.	131.	4.1	1146.	1086.	887.
280.00	9.86160	6.1184	302.35	99.	134.	9.0	2475.	2414.	841.
290.00	9.65477	5.6518	267.13	101.	138.	13.7	3835.	3773.	794.
300.00	9.43785	5.1910	233.19	103.	141.	18.5	5231.	5167.	744.
310.00	9.20873	4.7367	200.61	105.	146.	23.2	6666.	6601.	693.
317.93	9.01655	4.3808	175.79	107.	149.	26.9	7835.	7769.	651.
317.93	.26487	.026133	18.845	97.	114.	82.9	25632.	23367.	195.
320.00	.26204	.025717	19.169	98.	114.	83.6	25868.	23578.	196.
330.00	.24958	.023965	20.652	100.	114.	87.1	27008.	24604.	202.
340.00	.23869	.022532	22.030	102.	116.	90.6	28159.	25645.	207.
350.00	.22902	.021328	23.330	104.	117.	93.9	29325.	26705.	212.
360.00	.22034	.020294	24.570	107.	119.	97.3	30509.	27785.	217.
370.00	.21245	.019391	25.762	109.	121.	100.6	31712.	28888.	222.
380.00	.20525	.018592	26.916	112.	124.	103.8	32936.	30013.	226.
390.00	.19861	.017876	28.037	114.	126.	107.1	34182.	31161.	230.
400.00	.19247	.017229	29.132	117.	128.	110.3	35451.	32333.	234.
410.00	.18676	.016639	30.203	120.	130.	113.5	36742.	33530.	238.
420.00	.18144	.016098	31.256	122.	133.	116.6	38057.	34750.	242.
430.00	.17645	.015599	32.292	125.	135.	119.8	39394.	35994.	245.
440.00	.17176	.015136	33.313	127.	137.	122.9	40755.	37262.	249.
450.00	.16735	.014705	34.321	129.	140.	126.0	42139.	38554.	252.
460.00	.16319	.014302	35.317	132.	142.	129.1	43547.	39870.	256.
470.00	.15925	.013923	36.303	134.	144.	132.2	44977.	41209.	259.
480.00	.15551	.013568	37.280	137.	146.	135.2	46429.	42571.	262.
490.00	.15196	.013233	38.249	139.	149.	138.3	47905.	43956.	265.
500.00	.14859	.012916	39.209	141.	151.	141.3	49402.	45364.	268.
510.00	.14537	.012615	40.163	143.	153.	144.3	50922.	46794.	271.
520.00	.14230	.012330	41.111	146.	155.	147.3	52463.	48246.	274.
530.00	.13937	.012059	42.052	148.	157.	150.3	54025.	49720.	277.
540.00	.13656	.011801	42.989	150.	159.	153.3	55609.	51215.	280.
550.00	.13388	.011555	43.920	152.	161.	156.2	57214.	52732.	283.
560.00	.13130	.011319	44.847	154.	164.	159.1	58839.	54269.	286.
570.00	.12883	.011094	45.769	156.	166.	162.0	60484.	55826.	289.
580.00	.12645	.010879	46.687	158.	167.	164.9	62149.	57404.	292.
590.00	.12416	.010672	47.602	160.	169.	167.8	63834.	59001.	294.
600.00	.12196	.010474	48.513	162.	171.	170.7	65538.	60618.	297.
610.00	.11984	.010283	49.421	164.	173.	173.5	67261.	62254.	300.
620.00	.11780	.010100	50.326	166.	175.	176.4	69003.	63909.	302.
630.00	.11583	.99232-2	51.228	168.	177.	179.2	70763.	65583.	305.
640.00	.11393	.97532-2	52.127	170.	179.	182.0	72541.	67275.	307.
650.00	.11209	.95892-2	53.024	172.	181.	184.8	74337.	68984.	310.
660.00	.11031	.94310-2	53.918	173.	182.	187.5	76151.	70712.	312.
670.00	.10859	.92782-2	54.810	175.	184.	190.3	77982.	72457.	315.
680.00	.10692	.91306-2	55.700	177.	186.	193.0	79831.	74219.	317.
690.00	.10531	.89878-2	56.588	178.	187.	195.7	81696.	75998.	320.
700.00	.10374	.88496-2	57.474	180.	189.	198.5	83577.	77794.	322.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

7.00 BAR ISOBAR

T	DENSITY	DP/DT	DP/DD	CV	CP	S*	H*	U	VEL SND
DEG K	MOL/DM3	BAR/K	BAR/(MOL/DM3)	- - J/MOL /DEG K) - -			- - J/MOL	- -	M/SE
250.00	10.43859	7.5505	414.66	95.	126.	-5.8	-1424.	-1491.	975.
260.00	10.25378	7.0792	377.20	96.	129.	-.8	-149.	-218.	933.
270.00	10.06291	6.6060	340.08	97.	131.	4.1	1151.	1081.	889.
280.00	9.86490	6.1346	303.74	99.	134.	8.9	2479.	2408.	843.
290.00	9.65850	5.6677	268.50	100.	138.	13.7	3839.	3767.	796.
300.00	9.44213	5.2069	234.54	102.	141.	18.4	5234.	5160.	746.
310.00	9.21369	4.7527	201.96	105.	146.	23.1	6669.	6593.	695.
320.00	8.97035	4.3049	170.80	107.	150.	27.8	8147.	8069.	642.
324.10	8.86528	4.1226	158.42	108.	152.	29.8	8768.	8690.	620.
324.10	.30917	.031150	18.333	99.	117.	83.2	26094.	23829.	193.
330.00	.29963	.029707	19.303	101.	117.	85.3	26785.	24449.	197.
340.00	.28535	.027668	20.832	103.	118.	88.8	27961.	25508.	203.
350.00	.27290	.026002	22.251	105.	119.	92.3	29147.	26582.	209.
360.00	.26187	.024603	23.589	107.	121.	95.7	30346.	27673.	214.
370.00	.25196	.023405	24.862	110.	123.	99.0	31563.	28785.	219.
380.00	.24298	.022359	26.085	112.	125.	102.3	32798.	29917.	223.
390.00	.23478	.021434	27.266	115.	127.	105.6	34054.	31072.	228.
400.00	.22723	.020606	28.414	117.	129.	108.8	35330.	32250.	232.
410.00	.22024	.019859	29.533	120.	131.	112.0	36629.	33451.	236.
420.00	.21376	.019178	30.627	122.	133.	115.2	37950.	34675.	240.
430.00	.20770	.018554	31.701	125.	135.	118.3	39293.	35923.	244.
440.00	.20204	.017978	32.757	127.	138.	121.5	40659.	37195.	247.
450.00	.19671	.017445	33.797	130.	140.	124.6	42048.	38490.	251.
460.00	.19170	.016948	34.823	132.	142.	127.7	43459.	39808.	254.
470.00	.18697	.016484	35.837	134.	145.	130.8	44893.	41150.	258.
480.00	.18250	.016049	36.839	137.	147.	133.8	46350.	42514.	261.
490.00	.17825	.015640	37.831	139.	149.	136.9	47828.	43901.	264.
500.00	.17422	.015255	38.815	141.	151.	139.9	49329.	45311.	267.
510.00	.17039	.014890	39.790	144.	153.	142.9	50851.	46743.	270.
520.00	.16673	.014545	40.757	146.	155.	145.9	52395.	48197.	273.
530.00	.16324	.014218	41.717	148.	158.	148.9	53960.	49672.	276.
540.00	.15991	.013906	42.671	150.	160.	151.9	55546.	51169.	279.
550.00	.15672	.013609	43.620	152.	162.	154.8	57153.	52687.	282.
560.00	.15367	.013327	44.562	154.	164.	157.8	58780.	54225.	285.
570.00	.15074	.013056	45.500	156.	166.	160.7	60427.	55784.	288.
580.00	.14793	.012798	46.433	158.	168.	163.6	62095.	57362.	291.
590.00	.14522	.012550	47.362	160.	170.	166.5	63781.	58961.	294.
600.00	.14262	.012313	48.286	162.	172.	169.3	65487.	60579.	296.
610.00	.14012	.012085	49.207	164.	173.	172.2	67212.	62216.	299.
620.00	.13771	.011866	50.124	166.	175.	175.0	68955.	63872.	302.
630.00	.13539	.011656	51.038	168.	177.	177.8	70717.	65546.	304.
640.00	.13314	.011453	51.948	170.	179.	180.6	72496.	67239.	307.
650.00	.13097	.011258	52.856	172.	181.	183.4	74294.	68949.	309.
660.00	.12888	.011070	53.761	173.	182.	186.2	76109.	70678.	312.
670.00	.12686	.010888	54.663	175.	184.	189.0	77941.	72423.	314.
680.00	.12490	.010712	55.563	177.	186.	191.7	79791.	74186.	317.
690.00	.12300	.010543	56.460	178.	187.	194.4	81657.	75966.	319.
700.00	.12116	.010379	57.355	180.	189.	197.1	83540.	77762.	322.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

8.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV - - J/MOL /DEG K) - -	CP	S* - -	H* - - J/MOL	U - -	VEL SND M/SEC
250.00	10.44100	7.5693	416.19	95.	126.	-5.8	-1419.	-1495.	977.
260.00	10.25643	7.0968	378.67	96.	129.	-.8	-144.	-222.	935.
270.00	10.06584	6.6227	341.49	97.	131.	4.1	1156.	1076.	891.
280.00	9.86819	6.1507	305.12	99.	134.	8.9	2484.	2403.	845.
290.00	9.66222	5.6836	269.86	100.	138.	13.7	3843.	3760.	798.
300.00	9.44638	5.2227	235.89	102.	141.	18.4	5237.	5153.	748.
310.00	9.21863	4.7687	203.31	105.	145.	23.1	6671.	6584.	697.
320.00	8.97618	4.3213	172.16	107.	150.	27.8	8149.	8059.	644.
329.66	8.72429	3.8942	143.41	110.	155.	32.3	9623.	9532.	591.
329.66	.35415	.036398	17.800	101.	121.	83.5	26501.	24243.	191.
330.00	.35345	.036286	17.861	101.	121.	83.7	26543.	24279.	191.
340.00	.33486	.033413	19.571	103.	121.	87.3	27750.	25361.	198.
350.00	.31901	.031139	21.129	105.	121.	90.8	28959.	26451.	204.
360.00	.30519	.029277	22.576	108.	122.	94.2	30177.	27556.	210.
370.00	.29295	.027711	23.939	110.	124.	97.6	31408.	28677.	215.
380.00	.28195	.026367	25.237	112.	126.	100.9	32656.	29818.	220.
390.00	.27199	.025194	26.483	115.	128.	104.2	33922.	30980.	225.
400.00	.26288	.024156	27.686	117.	130.	107.5	35207.	32164.	229.
410.00	.25450	.023227	28.854	120.	132.	110.7	36513.	33370.	234.
420.00	.24675	.022387	29.993	122.	134.	113.9	37841.	34599.	238.
430.00	.23955	.021623	31.107	125.	136.	117.1	39191.	35851.	242.
440.00	.23283	.020922	32.198	127.	138.	120.2	40562.	37126.	245.
450.00	.22654	.020275	33.271	130.	140.	123.3	41956.	38424.	249.
460.00	.22063	.019676	34.327	132.	143.	126.4	43371.	39745.	253.
470.00	.21506	.019119	35.369	134.	145.	129.5	44809.	41090.	256.
480.00	.20980	.018598	36.397	137.	147.	132.6	46270.	42456.	260.
490.00	.20483	.018109	37.414	139.	149.	135.7	47752.	43846.	263.
500.00	.20012	.017650	38.420	141.	151.	138.7	49255.	45258.	266.
510.00	.19564	.017217	39.416	144.	154.	141.7	50781.	46691.	269.
520.00	.19137	.016808	40.403	146.	156.	144.7	52327.	48147.	272.
530.00	.18731	.016420	41.383	148.	158.	147.7	53895.	49624.	276.
540.00	.18343	.016052	42.355	150.	160.	150.7	55483.	51122.	279.
550.00	.17973	.015702	43.320	152.	162.	153.6	57092.	52641.	282.
560.00	.17618	.015369	44.279	154.	164.	156.6	58722.	54181.	284.
570.00	.17278	.015051	45.232	156.	166.	159.5	60371.	55741.	287.
580.00	.16952	.014748	46.180	158.	168.	162.4	62040.	57321.	290.
590.00	.16639	.014458	47.122	160.	170.	165.3	63728.	58920.	293.
600.00	.16338	.014180	48.060	162.	172.	168.2	65436.	60539.	296.
610.00	.16049	.013913	48.994	164.	174.	171.0	67162.	62177.	298.
620.00	.15770	.013657	49.923	166.	175.	173.8	68907.	63834.	301.
630.00	.15502	.013411	50.849	168.	177.	176.7	70670.	65509.	304.
640.00	.15242	.013175	51.771	170.	179.	179.5	72451.	67203.	306.
650.00	.14992	.012947	52.689	172.	181.	182.3	74250.	68914.	309.
660.00	.14751	.012727	53.604	173.	183.	185.0	76067.	70643.	312.
670.00	.14517	.012516	54.517	175.	184.	187.8	77900.	72390.	314.
680.00	.14292	.012312	55.426	177.	186.	190.5	79751.	74153.	317.
690.00	.14073	.012114	56.333	178.	188.	193.3	81618.	75934.	319.
700.00	.13861	.011924	57.237	180.	189.	196.0	83502.	77731.	322.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(N.B.T,LIQUID)

9.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV	CP	S*	H*	U	VEL SND M/SEC
				- - J/MOL /DEG K) - -			- - J/MOL	- -	
250.00	10.44340	7.5881	417.71	95.	126.	-5.8	-1413.	-1500.	979.
260.00	10.25906	7.1143	380.13	96.	129.	-.8	-139.	-227.	937.
270.00	10.06876	6.6393	342.91	97.	131.	4.1	1160.	1071.	893.
280.00	9.87146	6.1668	306.50	99.	134.	8.9	2488.	2397.	847.
290.00	9.66592	5.6993	271.22	100.	138.	13.7	3847.	3754.	800.
300.00	9.45061	5.2384	237.23	102.	141.	18.4	5240.	5145.	750.
310.00	9.22353	4.7846	204.66	105.	145.	23.1	6673.	6576.	699.
320.00	8.98197	4.3377	173.52	107.	150.	27.8	8150.	8050.	647.
330.00	8.72198	3.8963	143.80	110.	155.	32.5	9676.	9573.	592.
334.72	8.59121	3.6890	130.23	111.	158.	34.7	10417.	10312.	566.
334.72	.39992	.041887	17.250	103.	125.	83.8	26867.	24616.	189.
340.00	.38776	.039904	18.237	104.	124.	85.8	27522.	25201.	193.
350.00	.36769	.036822	19.956	106.	124.	89.4	28760.	26312.	200.
360.00	.35054	.034367	21.527	108.	124.	92.9	29999.	27432.	206.
370.00	.33557	.032347	22.990	110.	125.	96.3	31247.	28565.	212.
380.00	.32227	.030643	24.370	113.	127.	99.7	32508.	29716.	217.
390.00	.31033	.029175	25.686	115.	129.	103.0	33786.	30886.	222.
400.00	.29949	.027892	26.949	118.	130.	106.2	35081.	32076.	227.
410.00	.28957	.026754	28.169	120.	132.	109.5	36396.	33288.	231.
420.00	.28045	.025734	29.353	122.	135.	112.7	37731.	34521.	236.
430.00	.27201	.024812	30.508	125.	137.	115.9	39086.	35778.	240.
440.00	.26416	.023972	31.637	127.	139.	119.1	40463.	37056.	244.
450.00	.25683	.023200	32.743	130.	141.	122.2	41862.	38358.	247.
460.00	.24997	.022469	33.830	132.	143.	125.3	43283.	39682.	251.
470.00	.24352	.021829	34.900	134.	145.	128.4	44725.	41029.	255.
480.00	.23745	.021215	35.955	137.	147.	131.5	46189.	42398.	258.
490.00	.23171	.020641	36.996	139.	150.	134.6	47674.	43790.	262.
500.00	.22628	.020103	38.025	141.	152.	137.6	49181.	45204.	265.
510.00	.22113	.019596	39.043	144.	154.	140.6	50710.	46639.	268.
520.00	.21623	.019119	40.050	146.	156.	143.7	52259.	48097.	271.
530.00	.21157	.018667	41.049	148.	158.	146.6	53829.	49575.	275.
540.00	.20713	.018240	42.039	150.	160.	149.6	55420.	51075.	278.
550.00	.20289	.017834	43.021	152.	162.	152.6	57032.	52596.	281.
560.00	.19884	.017448	43.996	154.	164.	155.5	58663.	54137.	284.
570.00	.19496	.017080	44.965	156.	166.	158.4	60314.	55698.	287.
580.00	.19124	.016729	45.927	158.	168.	161.3	61985.	57279.	290.
590.00	.18767	.016394	46.884	160.	170.	164.2	63675.	58880.	292.
600.00	.18424	.016074	47.835	162.	172.	167.1	65385.	60500.	295.
610.00	.18094	.015767	48.781	164.	174.	170.0	67113.	62139.	298.
620.00	.17777	.015472	49.723	166.	176.	172.8	68859.	63796.	301.
630.00	.17472	.015189	50.660	168.	177.	175.6	70624.	65473.	303.
640.00	.17177	.014918	51.593	170.	179.	178.4	72406.	67167.	306.
650.00	.16893	.014656	52.523	172.	181.	181.2	74207.	68879.	309.
660.00	.16619	.014405	53.449	173.	183.	184.0	76025.	70609.	311.
670.00	.16354	.014162	54.371	175.	184.	186.8	77859.	72356.	314.
680.00	.16098	.013928	55.290	177.	186.	189.5	79711.	74121.	316.
690.00	.15850	.013703	56.206	178.	188.	192.2	81580.	75902.	319.
700.00	.15610	.013485	57.119	180.	189.	194.9	83465.	77699.	321.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

10.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV	CP	S*	H*	U	VEL SND M/SEC
				- - J/MOL /DEG K) - -			- - J/MOL	- -	
250.00	10.44579	7.6067	419.23	95.	126.	-5.8	-1408.	-1504.	981.
260.00	10.26169	7.1317	381.59	96.	129.	-.9	-134.	-232.	939.
270.00	10.07167	6.6559	344.32	97.	131.	4.1	1165.	1066.	895.
280.00	9.87471	6.1828	307.88	99.	134.	8.9	2492.	2391.	849.
290.00	9.66959	5.7150	272.57	100.	138.	13.6	3851.	3747.	802.
300.00	9.45481	5.2540	238.58	102.	141.	18.4	5244.	5138.	752.
310.00	9.22840	4.8004	206.00	105.	145.	23.1	6676.	6567.	702.
320.00	8.98771	4.3539	174.87	107.	150.	27.7	8151.	8040.	649.
330.00	8.72891	3.9133	145.17	110.	155.	32.4	9676.	9561.	595.
339.39	8.46433	3.5026	118.53	112.	161.	36.9	11160.	11042.	541.
339.39	.44656	.047625	16.689	105.	128.	84.1	27196.	24957.	187.
340.00	.44482	.047327	16.814	105.	128.	84.4	27275.	25027.	188.
350.00	.41940	.043159	18.726	107.	127.	88.0	28547.	26162.	195.
360.00	.39820	.039942	20.440	109.	126.	91.6	29812.	27300.	202.
370.00	.38001	.037356	22.014	111.	127.	95.1	31079.	28448.	208.
380.00	.36407	.035214	23.484	113.	128.	98.5	32356.	29609.	214.
390.00	.34988	.033398	24.874	115.	130.	101.8	33646.	30788.	219.
400.00	.33712	.031823	26.200	118.	131.	105.1	34952.	31985.	224.
410.00	.32552	.030451	27.475	120.	133.	108.4	36275.	33203.	229.
420.00	.31490	.029227	28.708	123.	135.	111.6	37618.	34442.	233.
430.00	.30511	.028128	29.905	125.	137.	114.8	38980.	35703.	238.
440.00	.29605	.027132	31.072	127.	139.	118.0	40364.	36986.	242.
450.00	.28762	.026224	32.213	130.	141.	121.2	41768.	38291.	246.
460.00	.27975	.025389	33.332	132.	144.	124.3	43193.	39618.	250.
470.00	.27237	.024618	34.431	135.	146.	127.4	44639.	40968.	253.
480.00	.26543	.023903	35.512	137.	148.	130.5	46107.	42340.	257.
490.00	.25889	.023237	36.578	139.	150.	133.6	47596.	43734.	260.
500.00	.25272	.022614	37.630	141.	152.	136.6	49107.	45150.	264.
510.00	.24686	.022029	38.669	144.	154.	139.7	50638.	46587.	267.
520.00	.24131	.021479	39.697	146.	156.	142.7	52190.	48046.	270.
530.00	.23604	.020960	40.715	148.	158.	145.7	53763.	49527.	274.
540.00	.23101	.020469	41.723	150.	160.	148.7	55357.	51028.	277.
550.00	.22622	.020004	42.723	152.	162.	151.6	56970.	52550.	280.
560.00	.22164	.019563	43.714	154.	164.	154.6	58604.	54092.	283.
570.00	.21726	.019143	44.698	156.	166.	157.5	60257.	55655.	286.
580.00	.21307	.018742	45.675	158.	168.	160.4	61930.	57237.	289.
590.00	.20905	.018360	46.646	160.	170.	163.3	63622.	58839.	292.
600.00	.20519	.017995	47.610	162.	172.	166.2	65333.	60460.	295.
610.00	.20149	.017646	48.570	164.	174.	169.0	67063.	62100.	297.
620.00	.19792	.017312	49.524	166.	176.	171.9	68811.	63759.	300.
630.00	.19449	.016991	50.473	168.	178.	174.7	70577.	65436.	303.
640.00	.19119	.016682	51.417	170.	179.	177.5	72361.	67131.	306.
650.00	.18800	.016386	52.357	172.	181.	180.3	74163.	68844.	308.
660.00	.18493	.016101	53.294	173.	183.	183.1	75982.	70575.	311.
670.00	.18196	.015827	54.226	175.	184.	185.8	77818.	72323.	313.
680.00	.17909	.015562	55.155	177.	186.	188.6	79671.	74088.	316.
690.00	.17631	.015307	56.080	179.	188.	191.3	81541.	75869.	319.
700.00	.17363	.015061	57.002	180.	189.	194.0	83427.	77668.	321.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

12.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV	CP	S*	H*	U	VEL SND
				- - J/MOL /DEG K) - -			- - J/MOL	- -	M/SEC
250.00	10.45054	7.6438	422.27	94.	126.	-5.9	-1397.	-1512.	985.
260.00	10.26691	7.1664	384.49	96.	129.	-.9	-124.	-241.	943.
270.00	10.07746	6.6888	347.13	97.	131.	4.0	1175.	1056.	899.
280.00	9.88118	6.2146	310.63	98.	134.	8.8	2501.	2380.	853.
290.00	9.67689	5.7461	275.27	100.	137.	13.6	3858.	3734.	806.
300.00	9.46315	5.2850	241.25	102.	141.	18.3	5250.	5123.	757.
310.00	9.23805	4.8317	208.67	104.	145.	23.0	6680.	6550.	706.
320.00	8.99906	4.3861	177.56	107.	150.	27.7	8154.	8020.	654.
330.00	8.74255	3.9470	147.90	109.	155.	32.4	9676.	9538.	600.
340.00	8.46306	3.5119	119.63	112.	161.	37.1	11255.	11113.	544.
347.77	8.22445	3.1738	98.550	114.	167.	40.8	12528.	12382.	497.
347.77	.54283	.059897	15.542	108.	136.	84.6	27769.	25559.	183.
350.00	.53448	.058408	16.048	109.	135.	85.5	28070.	25825.	185.
360.00	.50196	.052893	18.124	110.	132.	89.2	29403.	27012.	193.
370.00	.47532	.048708	19.966	112.	131.	92.8	30719.	28195.	201.
380.00	.45272	.045387	21.645	114.	132.	96.3	32033.	29383.	207.
390.00	.43310	.042662	23.203	116.	132.	99.8	33353.	30582.	213.
400.00	.41576	.040370	24.669	118.	134.	103.1	34683.	31797.	219.
410.00	.40024	.038402	26.063	121.	135.	106.4	36027.	33028.	224.
420.00	.38620	.036684	27.398	123.	137.	109.7	37386.	34279.	229.
430.00	.37339	.035165	28.686	125.	139.	113.0	38764.	35550.	234.
440.00	.36163	.033806	29.933	128.	141.	116.2	40160.	36841.	238.
450.00	.35076	.032580	31.146	130.	143.	119.4	41575.	38154.	242.
460.00	.34067	.031464	32.330	132.	145.	122.5	43010.	39488.	246.
470.00	.33127	.030442	33.489	135.	147.	125.6	44466.	40844.	250.
480.00	.32247	.029500	34.625	137.	149.	128.7	45942.	42221.	254.
490.00	.31421	.028628	35.742	139.	151.	131.8	47439.	43620.	258.
500.00	.30643	.027818	36.841	142.	153.	134.9	48956.	45040.	262.
510.00	.29909	.027061	37.924	144.	155.	137.9	50494.	46482.	265.
520.00	.29215	.026351	38.993	146.	157.	141.0	52052.	47945.	268.
530.00	.28556	.025685	40.050	148.	159.	144.0	53631.	49428.	272.
540.00	.27931	.025057	41.094	150.	161.	147.0	55229.	50933.	275.
550.00	.27336	.024464	42.128	152.	163.	149.9	56848.	52458.	278.
560.00	.26769	.023903	43.152	154.	165.	152.9	58486.	54003.	281.
570.00	.26227	.023370	44.167	156.	167.	155.8	60143.	55568.	285.
580.00	.25710	.022864	45.174	158.	169.	158.7	61820.	57153.	288.
590.00	.25215	.022382	46.173	160.	171.	161.6	63516.	58757.	291.
600.00	.24740	.021923	47.164	162.	172.	164.5	65231.	60380.	293.
610.00	.24285	.021484	48.149	164.	174.	167.4	66964.	62022.	296.
620.00	.23847	.021064	49.128	166.	176.	170.2	68715.	63683.	299.
630.00	.23427	.020663	50.100	168.	178.	173.1	70484.	65362.	302.
640.00	.23022	.020278	51.068	170.	180.	175.9	72271.	67059.	305.
650.00	.22632	.019908	52.029	172.	181.	178.7	74076.	68774.	307.
660.00	.22256	.019553	52.987	173.	183.	181.5	75898.	70506.	310.
670.00	.21894	.019212	53.939	175.	185.	184.2	77736.	72255.	313.
680.00	.21544	.018883	54.887	177.	186.	187.0	79592.	74022.	315.
690.00	.21206	.018566	55.831	179.	188.	189.7	81464.	75805.	318.
700.00	.20879	.018261	56.771	180.	190.	192.4	83352.	77604.	321.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

14.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV - - J/MOL /DEG K) - -	CP	S* - -	H* - - J/MOL	U - -	VEL SND M/SEC
250.00	10.45526	7.6806	425.29	94.	126.	-5.9	-1386.	-1520.	989.
260.00	10.27209	7.2007	387.39	96.	129.	-.9	-114.	-250.	947.
270.00	10.08320	6.7214	349.93	97.	131.	4.0	1184.	1046.	903.
280.00	9.88759	6.2461	313.36	98.	134.	8.8	2510.	2368.	857.
290.00	9.68413	5.7770	277.96	100.	137.	13.6	3866.	3722.	810.
300.00	9.47139	5.3156	243.91	102.	141.	18.3	5257.	5109.	761.
310.00	9.24757	4.8626	211.32	104.	145.	23.0	6685.	6534.	711.
320.00	9.01024	4.4178	180.23	107.	149.	27.6	8156.	8001.	659.
330.00	8.75596	3.9801	150.61	109.	155.	32.3	9676.	9516.	605.
340.00	8.47959	3.5473	122.41	112.	161.	37.0	11251.	11085.	550.
350.00	8.17281	3.1152	95.515	115.	168.	41.8	12893.	12721.	490.
355.19	7.99711	2.8889	82.014	117.	173.	44.3	13777.	13602.	458.
355.19	.64363	.073312	14.376	111.	143.	85.0	28251.	26076.	178.
360.00	.62075	.069124	15.565	112.	140.	86.9	28934.	26678.	183.
370.00	.58137	.062337	17.762	113.	137.	90.7	30319.	27911.	192.
380.00	.54949	.057238	19.701	115.	136.	94.4	31682.	29135.	200.
390.00	.52268	.053219	21.460	117.	136.	97.9	33039.	30361.	207.
400.00	.49954	.049939	23.087	119.	136.	101.3	34398.	31596.	213.
410.00	.47918	.047191	24.614	121.	137.	104.7	35766.	32844.	219.
420.00	.46103	.044840	26.063	123.	139.	108.0	37145.	34108.	224.
430.00	.44466	.042794	27.448	126.	140.	111.3	38539.	35391.	230.
440.00	.42976	.040989	28.781	128.	142.	114.5	39950.	36692.	234.
450.00	.41611	.039378	30.071	130.	144.	117.8	41377.	38013.	239.
460.00	.40352	.037927	31.323	133.	146.	120.9	42824.	39354.	243.
470.00	.39185	.036610	32.544	135.	148.	124.1	44289.	40717.	247.
480.00	.38098	.035405	33.737	137.	149.	127.2	45774.	42100.	251.
490.00	.37083	.034297	34.905	139.	151.	130.3	47279.	43504.	255.
500.00	.36131	.033272	36.053	142.	153.	133.4	48804.	44929.	259.
510.00	.35235	.032320	37.181	144.	155.	136.5	50348.	46375.	263.
520.00	.34390	.031432	38.292	146.	157.	139.5	51913.	47842.	266.
530.00	.33592	.030601	39.387	148.	159.	142.5	53497.	49329.	270.
540.00	.32835	.029821	40.469	150.	161.	145.5	55101.	50837.	273.
550.00	.32117	.029086	41.538	152.	163.	148.5	56724.	52365.	277.
560.00	.31434	.028393	42.595	155.	165.	151.4	58367.	53913.	280.
570.00	.30783	.027737	43.641	157.	167.	154.4	60029.	55481.	283.
580.00	.30162	.027116	44.677	159.	169.	157.3	61710.	57068.	286.
590.00	.29568	.026525	45.704	161.	171.	160.2	63409.	58675.	289.
600.00	.29000	.025964	46.722	162.	173.	163.1	65128.	60300.	292.
610.00	.28456	.025428	47.733	164.	175.	166.0	66864.	61944.	295.
620.00	.27935	.024917	48.736	166.	176.	168.8	68619.	63607.	298.
630.00	.27433	.024429	49.732	168.	178.	171.7	70391.	65288.	301.
640.00	.26952	.023961	50.722	170.	180.	174.5	72181.	66987.	304.
650.00	.26488	.023513	51.705	172.	182.	177.3	73988.	68703.	307.
660.00	.26042	.023083	52.683	173.	183.	180.1	75813.	70437.	309.
670.00	.25612	.022671	53.656	175.	185.	182.8	77654.	72188.	312.
680.00	.25197	.022274	54.623	177.	187.	185.6	79512.	73956.	315.
690.00	.24796	.021892	55.586	179.	188.	188.3	81386.	75740.	318.
700.00	.24409	.021524	56.544	180.	190.	191.0	83277.	77541.	320.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

16.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV - - J/MOL /DEG K) - -	CP	S*	H* - - J/MOL	U - -	VEL SND M/SEC
250.00	10.45994	7.7171	428.30	94.	126.	-5.9	-1375.	-1528.	993.
260.00	10.27724	7.2348	390.28	95.	128.	-1.0	-103.	-259.	951.
270.00	10.08889	6.7538	352.72	97.	131.	3.9	1194.	1035.	907.
280.00	9.89395	6.2773	316.08	98.	134.	8.8	2519.	2357.	861.
290.00	9.69129	5.8075	280.63	100.	137.	13.5	3874.	3709.	814.
300.00	9.47955	5.3460	246.56	102.	141.	18.2	5263.	5094.	765.
310.00	9.25698	4.8932	213.96	104.	145.	22.9	6690.	6517.	715.
320.00	9.02125	4.4491	182.88	107.	149.	27.6	8159.	7982.	663.
330.00	8.76912	4.0128	153.29	109.	154.	32.2	9676.	9493.	610.
340.00	8.49575	3.5821	125.16	112.	160.	36.9	11247.	11059.	555.
350.00	8.19344	3.1533	98.368	115.	167.	41.7	12883.	12688.	497.
360.00	7.84847	2.7195	72.753	118.	177.	46.5	14604.	14400.	434.
361.86	7.77766	2.6371	68.087	118.	180.	47.4	14936.	14730.	421.
361.86	.74982	.088008	13.193	114.	152.	85.3	28657.	26524.	174.
370.00	.70224	.079160	15.351	115.	145.	88.6	29864.	27586.	183.
380.00	.65669	.071282	17.626	116.	141.	92.5	31296.	28859.	192.
390.00	.62005	.065382	19.630	118.	140.	96.1	32700.	30120.	200.
400.00	.58937	.060739	21.447	120.	139.	99.6	34096.	31381.	207.
410.00	.56298	.056956	23.125	122.	140.	103.1	35491.	32649.	214.
420.00	.53984	.053790	24.700	124.	141.	106.5	36894.	33930.	220.
430.00	.51924	.051094	26.191	126.	142.	109.8	38307.	35225.	225.
440.00	.50069	.048731	27.616	128.	143.	113.1	39733.	36537.	230.
450.00	.48384	.046658	28.986	131.	145.	116.3	41175.	37868.	235.
460.00	.46842	.044809	30.311	133.	147.	119.5	42633.	39217.	240.
470.00	.45421	.043146	31.596	135.	149.	122.7	44109.	40587.	244.
480.00	.44106	.041636	32.847	137.	150.	125.8	45604.	41976.	249.
490.00	.42882	.040256	34.070	140.	152.	129.0	47117.	43386.	253.
500.00	.41740	.038988	35.266	142.	154.	132.1	48649.	44816.	257.
510.00	.40669	.037816	36.440	144.	156.	135.1	50201.	46267.	261.
520.00	.39662	.036727	37.594	146.	158.	138.2	51772.	47738.	264.
530.00	.38713	.035713	38.729	148.	160.	141.2	53362.	49229.	268.
540.00	.37816	.034765	39.848	150.	162.	144.2	54971.	50740.	272.
550.00	.36966	.033875	40.951	153.	164.	147.2	56600.	52271.	275.
560.00	.36160	.033037	42.041	155.	166.	150.2	58247.	53822.	278.
570.00	.35393	.032247	43.119	157.	168.	153.1	59914.	55393.	282.
580.00	.34663	.031500	44.185	159.	169.	156.1	61599.	56983.	285.
590.00	.33967	.030792	45.240	161.	171.	159.0	63302.	58592.	288.
600.00	.33301	.030119	46.285	162.	173.	161.9	65024.	60220.	291.
610.00	.32665	.029480	47.321	164.	175.	164.7	66764.	61866.	294.
620.00	.32055	.028870	48.349	166.	177.	167.6	68522.	63531.	297.
630.00	.31470	.028289	49.369	168.	178.	170.4	70298.	65213.	300.
640.00	.30908	.027734	50.381	170.	180.	173.3	72091.	66914.	303.
650.00	.30368	.027202	51.386	172.	182.	176.1	73901.	68632.	306.
660.00	.29849	.026693	52.384	173.	184.	178.9	75728.	70368.	309.
670.00	.29349	.026204	53.377	175.	185.	181.6	77572.	72120.	312.
680.00	.28867	.025735	54.363	177.	187.	184.4	79432.	73890.	314.
690.00	.28402	.025284	55.344	179.	188.	187.1	81309.	75675.	317.
700.00	.27953	.024851	56.320	180.	190.	189.8	83202.	77478.	320.

H* = H(T) - H(N.B.T.LIQUID) AND
S* = S(T) - S(N.B.T.LIQUID)

18.00 BAR ISOBAR

T	DENSITY	DP/DT	DP/DD	CV	CP	S*	H*	U	VEL SND
DEG K	MOL/DM3	BAR/K	BAR/(MOL/DM3)	- - J/MOL /DEG K) - -			- - J/MOL	- -	M/SEC
250.00	10.46460	7.7533	431.30	94.	126.	-6.0	-1365.	-1537.	996.
260.00	10.28234	7.2687	393.15	95.	128.	-1.0	-93.	-268.	954.
270.00	10.09454	6.7859	355.50	97.	131.	3.9	1204.	1025.	910.
280.00	9.90025	6.3082	318.79	98.	134.	8.7	2528.	2346.	865.
290.00	9.69838	5.8378	283.29	100.	137.	13.5	3882.	3696.	817.
300.00	9.48761	5.3760	249.19	102.	141.	18.2	5270.	5080.	769.
310.00	9.26627	4.9235	216.59	104.	145.	22.8	6695.	6501.	719.
320.00	9.03211	4.4801	185.51	107.	149.	27.5	8162.	7963.	668.
330.00	8.78205	4.0450	155.96	109.	154.	32.2	9676.	9471.	615.
340.00	8.51155	3.6163	127.88	112.	160.	36.8	11244.	11032.	561.
350.00	8.21349	3.1906	101.19	115.	167.	41.6	12875.	12656.	503.
360.00	7.87541	2.7618	75.724	118.	176.	46.4	14586.	14358.	442.
367.94	7.56237	2.4110	56.196	120.	187.	50.3	16025.	15787.	388.
367.94	.86237	.10416	11.999	117.	161.	85.6	29000.	26913.	169.
370.00	.84526	.10083	12.642	117.	158.	86.5	29329.	27200.	172.
380.00	.77794	.088317	15.383	117.	149.	90.6	30861.	28547.	183.
390.00	.72726	.079594	17.696	119.	145.	94.4	32330.	29855.	193.
400.00	.68653	.073040	19.738	120.	143.	98.0	33771.	31149.	201.
410.00	.65246	.067872	21.591	122.	143.	101.6	35201.	32442.	208.
420.00	.62318	.063654	23.305	124.	143.	105.0	36630.	33742.	215.
430.00	.59752	.060118	24.914	126.	144.	108.4	38065.	35052.	221.
440.00	.57470	.057094	26.438	129.	145.	111.7	39509.	36377.	226.
450.00	.55417	.054463	27.894	131.	146.	115.0	40966.	37718.	232.
460.00	.53554	.052143	29.293	133.	148.	118.2	42438.	39077.	237.
470.00	.51848	.050074	30.646	135.	150.	121.4	43926.	40454.	241.
480.00	.50279	.048212	31.958	138.	151.	124.6	45430.	41850.	246.
490.00	.48826	.046522	33.235	140.	153.	127.7	46952.	43266.	250.
500.00	.47475	.044978	34.482	142.	155.	130.8	48493.	44701.	254.
510.00	.46213	.043558	35.703	144.	157.	133.9	50052.	46157.	259.
520.00	.45032	.042247	36.899	146.	159.	137.0	51629.	47632.	262.
530.00	.43921	.041029	38.075	148.	161.	140.0	53226.	49127.	266.
540.00	.42874	.039895	39.231	151.	162.	143.1	54841.	50642.	270.
550.00	.41885	.038834	40.370	153.	164.	146.1	56474.	52177.	273.
560.00	.40949	.037838	41.493	155.	166.	149.0	58127.	53731.	277.
570.00	.40060	.036902	42.602	157.	168.	152.0	59798.	55305.	280.
580.00	.39215	.036018	43.698	159.	170.	154.9	61487.	56897.	284.
590.00	.38410	.035183	44.781	161.	172.	157.8	63195.	58509.	287.
600.00	.37643	.034392	45.853	163.	173.	160.7	64920.	60139.	290.
610.00	.36909	.033640	46.915	164.	175.	163.6	66664.	61787.	293.
620.00	.36208	.032926	47.967	166.	177.	166.5	68425.	63454.	296.
630.00	.35536	.032245	49.010	168.	179.	169.3	70204.	65139.	299.
640.00	.34891	.031596	50.044	170.	180.	172.2	72000.	66841.	302.
650.00	.34272	.030975	51.071	172.	182.	175.0	73813.	68561.	305.
660.00	.33678	.030382	52.090	174.	184.	177.8	75643.	70298.	308.
670.00	.33105	.029813	53.102	175.	185.	180.5	77490.	72052.	311.
680.00	.32554	.029268	54.108	177.	187.	183.3	79352.	73823.	314.
690.00	.32023	.028744	55.107	179.	189.	186.0	81232.	75611.	316.
700.00	.31511	.028241	56.101	180.	190.	188.8	83127.	77414.	319.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

20.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV - - J/MOL /DEG K) - -	CP	S* - -	H* - - J/MOL	U - -	VEL SND M/SEC
250.00	10.46922	7.7893	434.29	94.	126.	-6.0	-1354.	-1545.	1000.
260.00	10.28741	7.3022	396.01	95.	128.	-1.0	-83.	-277.	958.
270.00	10.10014	6.8178	358.27	97.	131.	3.9	1213.	1015.	914.
280.00	9.90649	6.3389	321.49	98.	134.	8.7	2536.	2335.	868.
290.00	9.70541	5.8678	285.94	100.	137.	13.4	3890.	3684.	821.
300.00	9.49560	5.4058	251.81	102.	140.	18.1	5277.	5066.	773.
310.00	9.27545	4.9534	219.20	104.	144.	22.8	6701.	6485.	723.
320.00	9.04282	4.5107	188.13	106.	149.	27.4	8166.	7945.	673.
330.00	8.79477	4.0767	158.61	109.	154.	32.1	9677.	9450.	620.
340.00	8.52703	3.6499	130.58	112.	159.	36.8	11241.	11006.	566.
350.00	8.23299	3.2271	103.97	114.	166.	41.5	12867.	12624.	510.
360.00	7.90132	2.8029	78.648	117.	175.	46.3	14570.	14317.	449.
370.00	7.50965	2.3666	54.374	121.	188.	51.2	16381.	16115.	382.
373.54	7.34812	2.2052	45.953	122.	195.	53.1	17059.	16787.	356.
373.54	.98253	.12200	10.793	119.	172.	85.8	29286.	27250.	164.
380.00	.91946	.10971	12.907	119.	161.	88.6	30359.	28184.	173.
390.00	.84734	.096521	15.630	120.	152.	92.7	31920.	29560.	185.
400.00	.79270	.087212	17.948	121.	148.	96.5	33420.	30897.	194.
410.00	.74864	.080164	20.005	123.	146.	100.1	34892.	32221.	202.
420.00	.71172	.074576	21.877	125.	146.	103.6	36353.	33543.	210.
430.00	.67996	.069996	23.614	127.	146.	107.1	37813.	34872.	216.
440.00	.65211	.066145	25.245	129.	147.	110.5	39278.	36211.	222.
450.00	.62733	.062843	26.792	131.	148.	113.8	40752.	37564.	228.
460.00	.60503	.059965	28.271	133.	149.	117.0	42238.	38932.	233.
470.00	.58478	.057424	29.694	135.	151.	120.3	43738.	40318.	238.
480.00	.56626	.055156	31.069	138.	152.	123.4	45254.	41722.	243.
490.00	.54920	.053112	32.403	140.	154.	126.6	46785.	43144.	248.
500.00	.53341	.051255	33.702	142.	156.	129.7	48334.	44585.	252.
510.00	.51874	.049558	34.969	144.	158.	132.8	49901.	46045.	256.
520.00	.50503	.047998	36.210	146.	159.	135.9	51486.	47525.	260.
530.00	.49219	.046555	37.425	149.	161.	139.0	53088.	49025.	264.
540.00	.48012	.045216	38.620	151.	163.	142.0	54709.	50544.	268.
550.00	.46875	.043968	39.794	153.	165.	145.0	56348.	52082.	272.
560.00	.45801	.042800	40.951	155.	167.	148.0	58006.	53639.	275.
570.00	.44783	.041705	42.091	157.	168.	151.0	59681.	55215.	279.
580.00	.43817	.040674	43.216	159.	170.	153.9	61375.	56811.	282.
590.00	.42899	.039702	44.328	161.	172.	156.8	63087.	58425.	286.
600.00	.42025	.038782	45.427	163.	174.	159.7	64816.	60057.	289.
610.00	.41191	.037911	46.514	164.	176.	162.6	66564.	61708.	292.
620.00	.40394	.037084	47.590	166.	177.	165.5	68328.	63377.	295.
630.00	.39631	.036298	48.657	168.	179.	168.3	70110.	65064.	299.
640.00	.38901	.035549	49.713	170.	181.	171.2	71909.	66768.	302.
650.00	.38201	.034834	50.761	172.	182.	174.0	73725.	68490.	305.
660.00	.37528	.034151	51.801	174.	184.	176.8	75558.	70229.	307.
670.00	.36881	.033498	52.833	175.	186.	179.6	77407.	71984.	310.
680.00	.36259	.032872	53.857	177.	187.	182.3	79273.	73757.	313.
690.00	.35660	.032272	54.875	179.	189.	185.1	81154.	75546.	316.
700.00	.35083	.031696	55.886	180.	191.	187.8	83052.	77351.	319.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

25.00 BAR ISOBAR

T	DENSITY	DP/DT	DP/DD	CV	CP	S*	H*	U	VEL SND
DEG K	MOL/DM3	BAR/K	BAR/(MOL/DM3)	- - J/MOL /DEG K) - -			- - J/MOL	- -	M/SEC
250.00	10.48063	7.8780	441.71	94.	126.	-6.1	-1326.	-1565.	1009.
260.00	10.29993	7.3850	403.12	95.	128.	-1.1	-56.	-299.	967.
270.00	10.11397	6.8963	365.14	96.	131.	3.8	1238.	991.	923.
280.00	9.92189	6.4145	328.18	98.	134.	8.6	2559.	2307.	878.
290.00	9.72269	5.9417	292.52	100.	137.	13.3	3910.	3653.	831.
300.00	9.51520	5.4789	258.31	102.	140.	18.0	5294.	5031.	783.
310.00	9.29793	5.0269	225.66	104.	144.	22.7	6714.	6445.	734.
320.00	9.06895	4.5855	194.61	106.	148.	27.3	8175.	7899.	684.
330.00	8.82566	4.1542	165.14	109.	153.	31.9	9680.	9397.	632.
340.00	8.56438	3.7315	137.23	111.	158.	36.6	11235.	10943.	580.
350.00	8.27955	3.3151	110.81	114.	165.	41.3	12849.	12547.	525.
360.00	7.96217	2.9009	85.776	117.	173.	46.0	14534.	14220.	467.
370.00	7.59566	2.4814	61.984	120.	184.	50.9	16312.	15983.	404.
380.00	7.14292	2.0405	39.142	124.	203.	56.0	18235.	17885.	332.
385.90	6.79477	1.7531	25.815	126.	226.	59.3	19492.	19124.	282.
385.90	1.32798	.17622	7.7332	125.	213.	85.9	29763.	27880.	151.
390.00	1.24813	.16016	9.5264	124.	192.	88.0	30587.	28584.	159.
400.00	1.11733	.13503	12.984	124.	169.	92.5	32372.	30135.	174.
410.00	1.02903	.11916	15.753	125.	160.	96.6	34012.	31583.	186.
420.00	.96211	.10786	18.132	126.	156.	100.4	35587.	32989.	196.
430.00	.90821	.099235	20.256	128.	153.	104.0	37131.	34378.	204.
440.00	.86311	.092366	22.198	130.	153.	107.5	38660.	35764.	212.
450.00	.82436	.086715	24.002	132.	153.	111.0	40186.	37153.	219.
460.00	.79044	.081950	25.700	134.	153.	114.3	41715.	38552.	225.
470.00	.76030	.077855	27.311	136.	154.	117.6	43251.	39963.	231.
480.00	.73322	.074282	28.853	138.	155.	120.9	44797.	41388.	236.
490.00	.70866	.071124	30.336	140.	157.	124.1	46356.	42828.	241.
500.00	.68621	.068302	31.768	142.	158.	127.3	47929.	44285.	246.
510.00	.66557	.065759	33.158	145.	160.	130.4	49516.	45760.	251.
520.00	.64648	.063449	34.510	147.	161.	133.5	51120.	47253.	255.
530.00	.62874	.061337	35.829	149.	163.	136.6	52740.	48763.	260.
540.00	.61219	.059394	37.119	151.	165.	139.7	54376.	50292.	264.
550.00	.59669	.057600	38.382	153.	166.	142.7	56030.	51840.	268.
560.00	.58214	.055934	39.623	155.	168.	145.7	57700.	53406.	272.
570.00	.56843	.054381	40.841	157.	170.	148.7	59388.	54990.	276.
580.00	.55548	.052930	42.041	159.	171.	151.7	61093.	56593.	279.
590.00	.54323	.051568	43.223	161.	173.	154.6	62816.	58214.	283.
600.00	.53160	.050288	44.388	163.	175.	157.5	64555.	59852.	286.
610.00	.52055	.049080	45.539	165.	177.	160.4	66312.	61509.	290.
620.00	.51003	.047939	46.675	166.	178.	163.3	68085.	63184.	293.
630.00	.50000	.046858	47.799	168.	180.	166.2	69875.	64875.	296.
640.00	.49041	.045832	48.911	170.	182.	169.0	71682.	66585.	300.
650.00	.48125	.044857	50.012	172.	183.	171.9	73506.	68311.	303.
660.00	.47247	.043928	51.102	174.	185.	174.7	75346.	70054.	306.
670.00	.46405	.043042	52.182	175.	186.	177.5	77201.	71814.	309.
680.00	.45596	.042196	53.253	177.	188.	180.2	79073.	73590.	312.
690.00	.44819	.041387	54.316	179.	190.	183.0	80961.	75383.	315.
700.00	.44072	.040612	55.370	180.	191.	185.7	82864.	77192.	318.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

30.00 BAR ISOBAR

T	DENSITY	DP/DT	DP/DD	CV	CP	S*	H*	U	VEL SND
DEG K	MOL/DM3	BAR/K	BAR/(MOL/DM3)	- - J/MOL /DEG K) - -			- - J/MOL	- -	M/SEC
250.00	10.49186	7.9651	449.06	94.	126.	-6.2	-1299.	-1585.	1019.
260.00	10.31222	7.4663	410.16	95.	128.	-1.2	-30.	-321.	976.
270.00	10.12753	6.9733	371.95	96.	131.	3.7	1262.	966.	932.
280.00	9.93697	6.4886	334.81	98.	133.	8.5	2582.	2280.	887.
290.00	9.73960	6.0139	299.02	99.	136.	13.2	3930.	3622.	840.
300.00	9.53432	5.5503	264.73	101.	140.	17.9	5311.	4997.	792.
310.00	9.31978	5.0984	232.04	104.	144.	22.5	6728.	6406.	744.
320.00	9.09423	4.6582	200.99	106.	148.	27.2	8184.	7854.	694.
330.00	8.85536	4.2291	171.57	108.	152.	31.8	9684.	9345.	644.
340.00	8.59997	3.8100	143.75	111.	157.	36.4	11232.	10883.	592.
350.00	8.32337	3.3991	117.48	114.	163.	41.0	12834.	12474.	539.
360.00	8.01822	2.9930	92.676	117.	171.	45.7	14503.	14129.	483.
370.00	7.67191	2.5866	69.247	120.	180.	50.5	16255.	15864.	424.
380.00	7.25918	2.1697	47.028	123.	195.	55.5	18125.	17712.	358.
390.00	6.71278	1.7162	25.673	127.	226.	60.9	20206.	19759.	281.
396.49	6.15926	1.3562	11.670	131.	295.	65.1	21843.	21356.	213.
396.49	1.78255	.25274	4.6033	130.	304.	85.3	29859.	28176.	136.
400.00	1.63440	.22295	6.6901	129.	240.	87.7	30795.	28960.	146.
410.00	1.40654	.17840	10.904	128.	189.	92.8	32878.	30745.	166.
420.00	1.27371	.15387	14.070	129.	172.	97.1	34670.	32314.	180.
430.00	1.17924	.13737	16.721	130.	165.	101.1	36348.	33804.	191.
440.00	1.10590	.12522	19.053	131.	161.	104.8	37972.	35260.	200.
450.00	1.04603	.11575	21.164	133.	159.	108.4	39569.	36701.	209.
460.00	.99550	.10809	23.112	135.	158.	111.9	41153.	38140.	216.
470.00	.95185	.10171	24.934	137.	158.	115.3	42734.	39582.	223.
480.00	.91348	.096291	26.657	139.	159.	118.6	44318.	41034.	229.
490.00	.87930	.091600	28.298	141.	159.	121.9	45908.	42497.	235.
500.00	.84852	.087484	29.871	143.	161.	125.1	47508.	43973.	240.
510.00	.82056	.083831	31.387	145.	162.	128.3	49120.	45464.	246.
520.00	.79497	.080556	32.854	147.	163.	131.5	50745.	46971.	251.
530.00	.77142	.077595	34.278	149.	165.	134.6	52383.	48494.	255.
540.00	.74962	.074900	35.665	151.	166.	137.7	54037.	50035.	260.
550.00	.72935	.072431	37.018	153.	168.	140.7	55706.	51593.	264.
560.00	.71043	.070158	38.342	155.	169.	143.8	57391.	53168.	268.
570.00	.69271	.068054	39.640	157.	171.	146.8	59092.	54761.	272.
580.00	.67605	.066100	40.913	159.	173.	149.8	60809.	56371.	276.
590.00	.66036	.064277	42.164	161.	174.	152.7	62542.	57999.	280.
600.00	.64553	.062571	43.395	163.	176.	155.7	64292.	59645.	284.
610.00	.63150	.060970	44.608	165.	177.	158.6	66059.	61308.	288.
620.00	.61818	.059464	45.804	167.	179.	161.5	67841.	62988.	291.
630.00	.60551	.058042	46.984	168.	181.	164.4	69640.	64686.	295.
640.00	.59345	.056699	48.149	170.	182.	167.2	71455.	66400.	298.
650.00	.58195	.055426	49.302	172.	184.	170.1	73286.	68131.	301.
660.00	.57095	.054217	50.441	174.	185.	172.9	75133.	69879.	304.
670.00	.56044	.053068	51.569	175.	187.	175.7	76996.	71643.	308.
680.00	.55036	.051973	52.685	177.	189.	178.5	78874.	73423.	311.
690.00	.54070	.050929	53.791	179.	190.	181.2	80768.	75220.	314.
700.00	.53142	.049932	54.888	180.	192.	184.0	82677.	77032.	317.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

35.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV	CP J/MOL /DEG K)	S*	H* J/MOL	U	VEL SND M/SEC
250.00	10.50291	8.0506	456.35	93.	126.	-6.3	-1271.	-1604.	1028.
260.00	10.32431	7.5461	417.14	95.	128.	-1.3	-4.	-343.	985.
270.00	10.14086	7.0488	378.69	96.	130.	3.6	1287.	942.	941.
280.00	9.95176	6.5612	341.37	97.	133.	8.4	2605.	2253.	896.
290.00	9.75614	6.0846	305.45	99.	136.	13.1	3951.	3592.	849.
300.00	9.55299	5.6202	271.08	101.	140.	17.8	5329.	4963.	802.
310.00	9.34104	5.1682	238.35	103.	143.	22.4	6743.	6368.	754.
320.00	9.11872	4.7289	207.29	106.	147.	27.0	8195.	7811.	705.
330.00	8.88398	4.3017	177.89	108.	152.	31.6	9689.	9295.	655.
340.00	8.63400	3.8857	150.15	111.	157.	36.2	11230.	10824.	604.
350.00	8.36478	3.4794	123.99	113.	162.	40.8	12823.	12404.	552.
360.00	8.07030	3.0802	99.380	116.	169.	45.5	14477.	14044.	499.
370.00	7.74068	2.6843	76.230	119.	177.	50.2	16207.	15755.	442.
380.00	7.35783	2.2848	54.452	122.	189.	55.1	18037.	17561.	381.
390.00	6.88133	1.8674	33.906	126.	210.	60.3	20025.	19516.	312.
400.00	6.17326	1.3872	14.243	130.	272.	66.2	22362.	21795.	226.
410.00	2.06083	.29408	4.8742	133.	304.	87.7	31069.	29370.	138.
420.00	1.70042	.22382	9.5684	131.	207.	93.5	33481.	31423.	161.
430.00	1.51729	.18959	12.984	132.	183.	98.0	35416.	33109.	176.
440.00	1.39342	.16754	15.815	133.	173.	102.1	37190.	34678.	188.
450.00	1.29991	.15167	18.292	134.	167.	105.9	38887.	36195.	198.
460.00	1.22494	.13950	20.525	136.	165.	109.6	40546.	37688.	207.
470.00	1.16251	.12976	22.580	137.	163.	113.1	42184.	39173.	215.
480.00	1.10911	.12172	24.498	139.	163.	116.5	43813.	40657.	222.
490.00	1.06255	.11493	26.306	141.	163.	119.9	45441.	42147.	229.
500.00	1.02133	.10909	28.026	143.	163.	123.2	47073.	43646.	235.
510.00	.98440	.10399	29.672	145.	164.	126.4	48712.	45156.	240.
520.00	.95101	.099487	31.256	147.	165.	129.6	50360.	46680.	246.
530.00	.92057	.095462	32.786	149.	167.	132.8	52020.	48218.	251.
540.00	.89265	.091836	34.270	151.	168.	135.9	53692.	49771.	256.
550.00	.86687	.088544	35.713	153.	169.	139.0	55378.	51340.	261.
560.00	.84298	.085537	37.119	155.	171.	142.1	57078.	52926.	265.
570.00	.82072	.082775	38.494	157.	172.	145.1	58793.	54528.	269.
580.00	.79991	.080224	39.839	159.	174.	148.1	60522.	56147.	274.
590.00	.78039	.077859	41.158	161.	175.	151.1	62268.	57783.	278.
600.00	.76204	.075658	42.454	163.	177.	154.1	64028.	59435.	282.
610.00	.74472	.073602	43.727	165.	178.	157.0	65805.	61105.	285.
620.00	.72834	.071675	44.981	167.	180.	159.9	67597.	62791.	289.
630.00	.71282	.069864	46.216	168.	182.	162.8	69404.	64494.	293.
640.00	.69808	.068159	47.434	170.	183.	165.7	71228.	66214.	296.
650.00	.68406	.066549	48.636	172.	185.	168.5	73067.	67950.	300.
660.00	.67070	.065025	49.823	174.	186.	171.3	74921.	69702.	303.
670.00	.65794	.063580	50.997	175.	188.	174.2	76791.	71471.	306.
680.00	.64575	.062207	52.158	177.	189.	177.0	78676.	73256.	310.
690.00	.63408	.060901	53.306	179.	191.	179.7	80576.	75056.	313.
700.00	.62289	.059657	54.443	180.	192.	182.5	82491.	76872.	316.

H* = H(T) - H(N.B.T.LIQUID) AND
S* = S(T) - S(N.B.T.LIQUID)

40.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV - - J/MOL	CP /DEG K) - -	S*	H* - - J/MOL	U - -	VEL SND M/SEC
250.00	10.51378	8.1347	463.57	93.	125.	-6.3	-1244.	-1624.	1036.
260.00	10.33620	7.6244	424.06	94.	128.	-1.4	22.	-365.	994.
270.00	10.15394	7.1230	385.37	96.	130.	3.5	1312.	918.	950.
280.00	9.96627	6.6324	347.88	97.	133.	8.3	2628.	2226.	904.
290.00	9.77234	6.1539	311.83	99.	136.	13.0	3972.	3563.	858.
300.00	9.57122	5.6884	277.36	101.	139.	17.7	5348.	4930.	811.
310.00	9.36174	5.2364	244.58	103.	143.	22.3	6758.	6331.	763.
320.00	9.14249	4.7978	213.50	106.	147.	26.9	8206.	7769.	715.
330.00	8.91160	4.3722	184.13	108.	151.	31.5	9695.	9246.	666.
340.00	8.66662	3.9589	156.43	110.	156.	36.0	11229.	10768.	616.
350.00	8.40410	3.5565	130.38	113.	161.	40.6	12814.	12338.	565.
360.00	8.11902	3.1631	105.91	116.	167.	45.3	14455.	13963.	513.
370.00	7.80352	2.7757	82.981	119.	175.	49.9	16166.	15653.	459.
380.00	7.44412	2.3896	61.526	122.	185.	54.7	17965.	17427.	402.
390.00	7.01425	1.9961	41.496	125.	201.	59.7	19889.	19319.	339.
400.00	6.44626	1.5752	22.852	129.	233.	65.2	22036.	21416.	267.
410.00	5.40632	1.0430	5.6857	135.	403.	72.2	24888.	24148.	171.
420.00	2.43768	.35647	4.5439	136.	333.	88.5	31629.	29988.	139.
430.00	1.97509	.26689	9.0767	134.	221.	94.6	34233.	32208.	160.
440.00	1.74782	.22418	12.529	134.	192.	99.3	36273.	33984.	176.
450.00	1.59725	.19706	15.427	135.	180.	103.5	38123.	35619.	188.
460.00	1.48513	.17772	17.975	136.	173.	107.3	39883.	37189.	198.
470.00	1.39613	.16297	20.279	138.	170.	111.0	41594.	38729.	207.
480.00	1.32254	.15123	22.401	140.	168.	114.6	43280.	40255.	215.
490.00	1.25998	.14158	24.382	142.	167.	118.0	44953.	41778.	222.
500.00	1.20567	.13346	26.252	144.	167.	121.4	46621.	43304.	229.
510.00	1.15780	.12649	28.029	145.	167.	124.7	48291.	44836.	235.
520.00	1.11505	.12043	29.729	147.	168.	127.9	49966.	46379.	241.
530.00	1.07651	.11508	31.365	149.	169.	131.1	51649.	47933.	247.
540.00	1.04147	.11031	32.944	151.	170.	134.3	53341.	49501.	252.
550.00	1.00939	.10602	34.475	153.	171.	137.4	55045.	51082.	257.
560.00	.97984	.10214	35.963	155.	172.	140.5	56761.	52679.	262.
570.00	.95249	.098594	37.413	157.	174.	143.6	58491.	54291.	267.
580.00	.92705	.095344	38.829	159.	175.	146.6	60234.	55919.	271.
590.00	.90331	.092348	40.214	161.	176.	149.6	61991.	57563.	275.
600.00	.88107	.089574	41.571	163.	178.	152.6	63763.	59223.	279.
- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
610.00	.86017	.086995	42.904	165.	179.	155.5	65550.	60900.	283.
620.00	.84047	.084589	44.213	167.	181.	158.5	67352.	62593.	287.
630.00	.82187	.082336	45.501	169.	182.	161.4	69169.	64302.	291.
640.00	.80425	.080222	46.770	170.	184.	164.3	71001.	66027.	295.
650.00	.78753	.078233	48.020	172.	185.	167.1	72847.	67768.	298.
660.00	.77164	.076356	49.253	174.	187.	170.0	74709.	69526.	302.
670.00	.75651	.074581	50.471	176.	188.	172.8	76586.	71299.	305.
680.00	.74207	.072900	51.674	177.	190.	175.6	78478.	73088.	309.
690.00	.72827	.071304	52.863	179.	191.	178.4	80385.	74892.	312.
700.00	.71508	.069787	54.040	181.	193.	181.1	82306.	76712.	315.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

45.00 BAR ISOBAR

T	DENSITY	DP/DT	DP/DD	CV	CP	S*	H*	U	VEL SND
DEG K	MOL/DM3	BAR/K	BAR/(MOL/DM3)	- - J/MOL /DEG K) - -			- - J/MOL - -		M/SEC
250.00	10.52448	8.2172	470.73	93.	125.	-6.4	-1216.	-1643.	1045.
260.00	10.34790	7.7013	430.91	94.	128.	-1.5	49.	-386.	1002.
270.00	10.16681	7.1958	391.99	96.	130.	3.4	1337.	895.	958.
280.00	9.98051	6.7022	354.32	97.	133.	8.2	2651.	2200.	913.
290.00	9.78822	6.2218	318.14	99.	136.	12.9	3993.	3534.	867.
300.00	9.58905	5.7553	283.58	101.	139.	17.6	5367.	4897.	820.
310.00	9.38193	5.3030	250.74	103.	143.	22.2	6774.	6294.	773.
320.00	9.16557	4.8649	219.64	105.	146.	26.8	8218.	7727.	725.
330.00	8.93831	4.4407	190.27	108.	151.	31.3	9702.	9199.	676.
340.00	8.69796	4.0296	162.62	110.	155.	35.9	11230.	10713.	627.
350.00	8.44156	3.6307	136.64	113.	160.	40.4	12807.	12273.	578.
360.00	8.16486	3.2422	112.29	116.	166.	45.0	14437.	13886.	527.
370.00	7.86150	2.8619	89.534	118.	173.	49.7	16131.	15559.	475.
380.00	7.52118	2.4864	68.323	121.	182.	54.4	17904.	17306.	420.
390.00	7.12534	2.1100	48.646	124.	195.	59.3	19782.	19150.	362.
400.00	6.63444	1.7223	30.550	128.	216.	64.5	21823.	21144.	298.
410.00	5.93353	1.2970	14.315	132.	269.	70.3	24195.	23436.	224.
420.00	4.35851	.73841	2.7342	138.	579.	79.4	27960.	26928.	140.
430.00	2.68775	.39665	5.4077	137.	310.	90.2	32579.	30905.	145.
440.00	2.20886	.30377	9.3636	136.	225.	96.2	35160.	33123.	163.
450.00	1.95474	.25580	12.668	136.	197.	100.9	37252.	34950.	178.
460.00	1.78438	.22482	15.528	137.	184.	105.1	39153.	36631.	189.
470.00	1.65727	.20259	18.079	139.	178.	109.0	40960.	38245.	200.
480.00	1.55645	.18561	20.403	140.	174.	112.7	42716.	39825.	208.
490.00	1.47322	.17208	22.556	142.	172.	116.2	44442.	41388.	217.
500.00	1.40258	.16096	24.572	144.	171.	119.7	46154.	42945.	224.
510.00	1.34137	.15159	26.477	146.	170.	123.0	47859.	44504.	231.
520.00	1.28749	.14357	28.292	148.	171.	126.4	49563.	46068.	237.
530.00	1.23946	.13658	30.029	150.	171.	129.6	51271.	47640.	243.
540.00	1.19622	.13043	31.701	152.	172.	132.8	52985.	49224.	249.
550.00	1.15695	.12495	33.317	154.	173.	136.0	54709.	50819.	254.
560.00	1.12103	.12002	34.883	155.	174.	139.1	56442.	52428.	259.
570.00	1.08799	.11556	36.405	157.	175.	142.2	58187.	54051.	264.
580.00	1.05743	.11150	37.889	159.	176.	145.2	59944.	55688.	269.
590.00	1.02904	.10777	39.337	161.	178.	148.3	61714.	57341.	273.
600.00	1.00256	.10434	40.754	163.	179.	151.3	63498.	59009.	277.
610.00	.97777	.10117	42.143	165.	180.	154.2	65296.	60693.	282.
620.00	.95449	.098219	43.505	167.	182.	157.2	67107.	62393.	286.
630.00	.93257	.095469	44.844	169.	183.	160.1	68933.	64108.	290.
640.00	.91187	.092897	46.161	170.	185.	163.0	70774.	65839.	293.
650.00	.89228	.090484	47.457	172.	186.	165.9	72629.	67586.	297.
660.00	.87370	.088214	48.734	174.	188.	168.7	74499.	69348.	301.
670.00	.85605	.086075	49.994	176.	189.	171.6	76383.	71126.	304.
680.00	.83925	.084053	51.238	177.	191.	174.4	78281.	72919.	308.
690.00	.82322	.082139	52.466	179.	192.	177.2	80194.	74728.	311.
700.00	.80792	.080323	53.680	181.	193.	179.9	82122.	76552.	315.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

50.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV	CP	S*	H*	U	VEL SND M/SEC
				- - J/MOL /DEG K) - -			- - J/MOL	- -	
250.00	10.53502	8.2984	477.83	93.	125.	-6.5	-1188.	-1663.	1053.
260.00	10.35941	7.7770	437.72	94.	128.	-1.5	76.	-407.	1011.
270.00	10.17946	7.2673	398.56	95.	130.	3.3	1363.	871.	966.
280.00	9.99449	6.7708	360.71	97.	133.	8.1	2675.	2175.	921.
290.00	9.80378	6.2884	324.39	99.	136.	12.8	4015.	3505.	875.
300.00	9.60649	5.8207	289.74	101.	139.	17.4	5386.	4865.	829.
310.00	9.40164	5.3680	256.83	103.	142.	22.0	6790.	6258.	782.
320.00	9.18803	4.9303	225.70	105.	146.	26.6	8231.	7687.	734.
330.00	8.96418	4.5073	196.33	108.	150.	31.2	9711.	9153.	686.
340.00	8.72815	4.0982	168.71	110.	154.	35.7	11233.	10660.	638.
350.00	8.47735	3.7023	142.79	113.	159.	40.3	12801.	12212.	590.
360.00	8.20819	3.3180	118.54	115.	165.	44.8	14422.	13813.	540.
370.00	7.91544	2.9437	95.916	118.	171.	49.4	16102.	15470.	490.
380.00	7.59104	2.5767	74.891	121.	179.	54.1	17853.	17194.	437.
390.00	7.22148	2.2133	55.467	124.	190.	58.9	19694.	19002.	383.
400.00	6.78132	1.8474	37.711	127.	206.	63.9	21664.	20927.	324.
410.00	6.21304	1.4675	21.878	130.	235.	69.3	23848.	23044.	260.
420.00	5.34268	1.0494	9.0333	135.	314.	75.7	26517.	25582.	190.
430.00	3.82881	.62255	4.1482	139.	413.	84.8	30381.	29075.	146.
440.00	2.83772	.42011	6.8600	138.	279.	92.6	33787.	32025.	154.
450.00	2.39450	.33325	10.243	138.	223.	98.2	36251.	34163.	169.
460.00	2.13250	.28342	13.308	138.	200.	102.8	38349.	36004.	182.
470.00	1.95089	.25008	16.058	140.	188.	106.9	40279.	37716.	193.
480.00	1.81350	.22575	18.559	141.	181.	110.8	42120.	39363.	203.
490.00	1.70378	.20700	20.865	143.	177.	114.5	43909.	40975.	211.
500.00	1.61290	.19197	23.016	144.	175.	118.0	45670.	42570.	219.
510.00	1.53561	.17957	25.041	146.	174.	121.5	47414.	44158.	226.
520.00	1.46858	.16911	26.961	148.	174.	124.9	49151.	45747.	233.
530.00	1.40954	.16013	28.795	150.	174.	128.2	50887.	47340.	240.
540.00	1.35691	.15230	30.554	152.	174.	131.4	52625.	48940.	246.
550.00	1.30951	.14540	32.249	154.	175.	134.6	54369.	50551.	251.
560.00	1.26648	.13925	33.889	156.	176.	137.8	56120.	52172.	256.
570.00	1.22714	.13372	35.480	158.	177.	140.9	57882.	53807.	262.
580.00	1.19094	.12872	37.027	159.	178.	144.0	59653.	55455.	266.
590.00	1.15748	.12416	38.535	161.	179.	147.0	61437.	57117.	271.
600.00	1.12640	.11998	40.008	163.	180.	150.0	63233.	58794.	276.
- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
610.00	1.09741	.11614	41.450	165.	182.	153.0	65041.	60485.	280.
620.00	1.07029	.11258	42.863	167.	183.	156.0	66863.	62192.	284.
630.00	1.04482	.10927	44.249	169.	184.	158.9	68699.	63913.	288.
640.00	1.02085	.10619	45.612	170.	186.	161.8	70548.	65650.	292.
650.00	.99822	.10331	46.951	172.	187.	164.7	72412.	67403.	296.
660.00	.97680	.10060	48.271	174.	188.	167.6	74289.	69170.	300.
670.00	.95650	.098062	49.570	176.	190.	170.4	76180.	70953.	304.
680.00	.93721	.095666	50.852	177.	191.	173.3	78086.	72751.	307.
690.00	.91885	.093404	52.117	179.	193.	176.1	80005.	74564.	311.
700.00	.90134	.091262	53.367	181.	194.	178.8	81939.	76392.	314.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV	CP	S*	H*	U	VEL SND M/SEC
				- - J/MOL	/DEG K)	- -	- - J/MOL	- -	
250.00	10.55565	8.4568	491.87	92.	125.	-6.6	-1132.	-1700.	1070.
260.00	10.38191	7.9245	451.16	94.	127.	-1.7	129.	-449.	1027.
270.00	10.20415	7.4067	411.53	95.	130.	3.1	1414.	826.	983.
280.00	10.02174	6.9042	373.32	97.	132.	7.9	2723.	2124.	937.
290.00	9.83404	6.4178	336.73	98.	135.	12.6	4059.	3449.	892.
300.00	9.64030	5.9477	301.88	100.	138.	17.2	5425.	4803.	846.
310.00	9.43969	5.4940	268.83	103.	142.	21.8	6824.	6189.	799.
320.00	9.23120	5.0567	237.62	105.	145.	26.4	8258.	7608.	753.
330.00	9.01362	4.6354	208.23	107.	149.	30.9	9730.	9064.	706.
340.00	8.78541	4.2295	180.64	110.	153.	35.4	11241.	10558.	659.
350.00	8.54458	3.8384	154.80	112.	158.	39.9	12796.	12094.	612.
360.00	8.28847	3.4609	130.68	115.	163.	44.4	14399.	13675.	565.
370.00	8.01348	3.0960	108.25	117.	168.	49.0	16055.	15306.	517.
380.00	7.71438	2.7420	87.476	120.	175.	53.5	17770.	16993.	468.
390.00	7.38338	2.3970	68.375	123.	183.	58.2	19558.	18746.	419.
400.00	7.00799	2.0586	51.000	126.	193.	62.9	21437.	20581.	367.
410.00	6.56672	1.7235	35.516	129.	208.	67.9	23440.	22526.	314.
420.00	6.01946	1.3884	22.339	132.	232.	73.2	25630.	24633.	260.
430.00	5.29384	1.0549	12.521	135.	272.	79.0	28134.	27000.	208.
440.00	4.36472	.75750	7.9557	138.	305.	85.8	31057.	29682.	174.
450.00	3.53481	.55893	8.2625	140.	276.	92.4	33999.	32301.	168.
460.00	2.99554	.44451	10.470	140.	237.	98.0	36552.	34549.	174.
470.00	2.64722	.37417	13.075	141.	213.	102.8	38790.	36523.	184.
480.00	2.40323	.32671	15.656	142.	199.	107.1	40842.	38345.	194.
490.00	2.21997	.29230	18.114	144.	190.	111.1	42785.	40082.	203.
500.00	2.07520	.26602	20.436	145.	185.	114.9	44661.	41770.	212.
510.00	1.95654	.24516	22.631	147.	182.	118.6	46496.	43430.	220.
520.00	1.85662	.22311	24.715	148.	180.	122.1	48307.	45076.	227.
530.00	1.77069	.21384	26.703	150.	179.	125.5	50104.	46716.	234.
540.00	1.69558	.20169	28.606	152.	179.	128.8	51894.	48356.	241.
550.00	1.62905	.19117	30.436	154.	179.	132.1	53683.	50000.	247.
560.00	1.56949	.18196	32.201	156.	179.	135.4	55474.	51651.	252.
570.00	1.51569	.17379	33.910	158.	180.	138.5	57269.	53311.	258.
580.00	1.46672	.16649	35.568	160.	181.	141.7	59072.	54981.	263.
590.00	1.42186	.15992	37.181	162.	182.	144.8	60883.	56663.	268.
600.00	1.38053	.15395	38.754	163.	183.	147.8	62704.	58358.	273.
- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
610.00	1.34227	.14850	40.289	165.	184.	150.9	64536.	60066.	278.
620.00	1.30669	.14351	41.792	167.	185.	153.8	66379.	61787.	282.
630.00	1.27349	.13890	43.264	169.	186.	156.8	68234.	63522.	286.
640.00	1.24240	.13463	44.707	171.	187.	159.8	70101.	65272.	291.
650.00	1.21320	.13067	46.125	172.	189.	162.7	71981.	67036.	295.
660.00	1.18569	.12697	47.520	174.	190.	165.6	73874.	68814.	299.
670.00	1.15971	.12351	48.891	176.	191.	168.4	75780.	70607.	303.
680.00	1.13512	.12027	50.243	177.	193.	171.3	77700.	72414.	306.
690.00	1.11179	.11722	51.575	179.	194.	174.1	79632.	74236.	310.
700.00	1.08963	.11434	52.889	181.	195.	176.9	81578.	76072.	314.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

70.00 BAR ISOBAR

T	DENSITY	DP/DT	DP/DD	CV	CP	S*	H*	U	VEL SND
DEG K	MOL/DM3	BAR/K	BAR/(MOL/DM3)	- - J/MOL	/DEG K)	- -	- - J/MOL	- -	M/SEC
250.00	10.57570	8.6102	505.69	92.	125.	-6.8	-1076.	-1738.	1086.
260.00	10.40375	8.0672	464.39	93.	127.	-1.9	184.	-489.	1043.
270.00	10.22808	7.5414	424.31	95.	129.	3.0	1465.	781.	998.
280.00	10.04809	7.0331	385.73	96.	132.	7.7	2771.	2075.	953.
290.00	9.86321	6.5425	348.86	98.	135.	12.4	4104.	3394.	908.
300.00	9.67278	6.0698	313.80	100.	138.	17.0	5466.	4742.	862.
310.00	9.47609	5.6148	280.60	102.	141.	21.6	6860.	6121.	816.
320.00	9.27228	5.1775	249.29	105.	145.	26.1	8288.	7533.	770.
330.00	9.06035	4.7573	219.85	107.	148.	30.6	9752.	8979.	724.
340.00	8.83906	4.3538	192.25	109.	152.	35.1	11254.	10462.	679.
350.00	8.60685	3.9663	166.45	112.	156.	39.6	12797.	11984.	633.
360.00	8.36174	3.5940	142.41	114.	161.	44.1	14385.	13548.	587.
370.00	8.10112	3.2360	120.09	117.	166.	48.5	16021.	15156.	542.
380.00	7.82146	2.8913	99.474	120.	172.	53.0	17709.	16814.	496.
390.00	7.51788	2.5587	80.550	122.	178.	57.6	19458.	18527.	450.
400.00	7.18337	2.2369	63.358	125.	186.	62.2	21279.	20304.	403.
410.00	6.80758	1.9250	47.996	128.	196.	66.9	23187.	22159.	356.
420.00	6.37497	1.6224	34.677	130.	209.	71.8	25208.	24110.	309.
430.00	5.86363	1.3308	23.816	133.	226.	76.9	27380.	26186.	264.
440.00	5.25387	1.0587	16.102	136.	247.	82.3	29747.	28415.	224.
450.00	4.57389	.82685	12.155	139.	260.	88.1	32297.	30766.	198.
460.00	3.93990	.65482	11.462	140.	251.	93.7	34868.	33091.	188.
470.00	3.44233	.53744	12.598	142.	233.	98.9	37290.	35256.	189.
480.00	3.07480	.45715	14.502	143.	216.	103.6	39530.	37253.	194.
490.00	2.79974	.40000	16.670	144.	204.	108.0	41627.	39127.	202.
500.00	2.58674	.35749	18.889	146.	196.	112.0	43627.	40921.	209.
510.00	2.41610	.32464	21.075	147.	191.	115.8	45561.	42664.	217.
520.00	2.27541	.29842	23.197	149.	187.	119.5	47452.	44375.	224.
530.00	2.15667	.27696	25.247	151.	185.	123.0	49315.	46069.	231.
540.00	2.05455	.25901	27.225	152.	184.	126.5	51160.	47753.	238.
550.00	1.96537	.24373	29.135	154.	183.	129.9	52997.	49435.	244.
560.00	1.88650	.23054	30.982	156.	183.	133.2	54829.	51118.	250.
570.00	1.81600	.21900	32.772	158.	183.	136.4	56660.	52806.	256.
580.00	1.75243	.20881	34.510	160.	184.	139.6	58495.	54501.	261.
590.00	1.69466	.19971	36.201	162.	184.	142.7	60335.	56204.	266.
600.00	1.64183	.19154	37.850	164.	185.	145.8	62182.	57918.	271.
610.00	1.59325	.18414	39.459	165.	186.	148.9	64037.	59643.	276.
620.00	1.54833	.17740	41.032	167.	187.	151.9	65901.	61380.	281.
630.00	1.50664	.17123	42.573	169.	188.	154.9	67776.	63130.	286.
640.00	1.46778	.16555	44.083	171.	189.	157.9	69662.	64893.	290.
650.00	1.43143	.16030	45.565	172.	190.	160.9	71559.	66669.	294.
660.00	1.39733	.15543	47.021	174.	191.	163.8	73468.	68458.	298.
670.00	1.36525	.15090	48.453	176.	193.	166.7	75389.	70261.	302.
680.00	1.33499	.14667	49.863	177.	194.	169.5	77322.	72078.	306.
690.00	1.30637	.14271	51.251	179.	195.	172.4	79268.	73909.	310.
700.00	1.27925	.13898	52.620	181.	196.	175.2	81226.	75754.	314.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV - - J/MOL	CP /DEG K)	S* - -	H* - - J/MOL	U - -	VEL SND M/SEC
250.00	10.59521	8.7588	519.31	92.	125.	-7.0	-1019.	-1774.	1102.
260.00	10.42499	8.2055	477.43	93.	127.	-2.0	238.	-529.	1058.
270.00	10.25130	7.6718	436.89	94.	129.	2.8	1517.	737.	1013.
280.00	10.07361	7.1577	397.95	96.	132.	7.5	2821.	2026.	968.
290.00	9.89139	6.6629	360.80	98.	134.	12.2	4150.	3341.	923.
300.00	9.70407	6.1875	325.52	100.	137.	16.8	5508.	4684.	878.
310.00	9.51101	5.7310	292.16	102.	141.	21.4	6897.	6056.	832.
320.00	9.31150	5.2932	260.74	104.	144.	25.9	8319.	7460.	787.
330.00	9.10469	4.8737	231.23	107.	148.	30.4	9776.	8898.	742.
340.00	8.88959	4.4719	203.60	109.	151.	34.8	11270.	10370.	697.
350.00	8.66496	4.0872	177.80	112.	155.	39.3	12803.	11880.	653.
360.00	8.42928	3.7189	153.80	114.	160.	43.7	14378.	13429.	609.
370.00	8.18063	3.3662	131.54	117.	164.	48.1	15997.	15019.	565.
380.00	7.91654	3.0283	111.00	119.	169.	52.6	17664.	16653.	521.
390.00	7.63379	2.7044	92.174	122.	175.	57.1	19383.	18335.	477.
400.00	7.32811	2.3939	75.064	124.	181.	61.6	21162.	20071.	434.
410.00	6.99380	2.0962	59.729	127.	189.	66.1	23010.	21866.	391.
420.00	6.62340	1.8115	46.283	130.	197.	70.8	24938.	23730.	348.
430.00	6.20787	1.5409	34.930	132.	208.	75.5	26963.	25675.	308.
440.00	5.73929	1.2881	25.975	135.	220.	80.4	29103.	27709.	270.
450.00	5.22035	1.0609	19.754	137.	231.	85.5	31364.	29831.	239.
460.00	4.68079	.86973	16.347	140.	237.	90.7	33712.	32002.	218.
470.00	4.17536	.72042	15.281	141.	233.	95.8	36067.	34151.	208.
480.00	3.74575	.60918	15.742	143.	224.	100.6	38353.	36217.	206.
490.00	3.39890	.52694	17.042	145.	214.	105.1	40538.	38185.	208.
500.00	3.12172	.46513	18.757	146.	205.	109.3	42631.	40068.	213.
510.00	2.89780	.41752	20.656	148.	199.	113.3	44649.	41889.	219.
520.00	2.71359	.37988	22.621	149.	194.	117.1	46614.	43666.	225.
530.00	2.55916	.34942	24.592	151.	191.	120.8	48540.	45414.	231.
540.00	2.42745	.32425	26.539	153.	189.	124.3	50440.	47144.	238.
550.00	2.31339	.30308	28.447	155.	188.	127.8	52323.	48865.	244.
560.00	2.21333	.28499	30.312	156.	187.	131.2	54196.	50581.	250.
570.00	2.12458	.26934	32.132	158.	187.	134.5	56063.	52298.	255.
580.00	2.04510	.25563	33.908	160.	187.	137.7	57930.	54018.	261.
590.00	1.97334	.24352	35.641	162.	187.	140.9	59798.	55744.	266.
600.00	1.90809	.23271	37.335	164.	188.	144.1	61671.	57478.	271.
610.00	1.84839	.22299	38.991	165.	188.	147.2	63550.	59221.	276.
620.00	1.79348	.21420	40.612	167.	189.	150.2	65435.	60975.	281.
630.00	1.74272	.20620	42.200	169.	190.	153.3	67330.	62739.	286.
640.00	1.69560	.19888	43.758	171.	191.	156.3	69233.	64515.	290.
650.00	1.65169	.19215	45.288	172.	192.	159.2	71147.	66304.	294.
660.00	1.61063	.18593	46.791	174.	193.	162.2	73072.	68105.	299.
670.00	1.57212	.18017	48.270	176.	194.	165.1	75007.	69918.	303.
680.00	1.53590	.17482	49.725	178.	195.	168.0	76954.	71745.	307.
690.00	1.50174	.16982	51.158	179.	196.	170.8	78912.	73585.	311.
700.00	1.46945	.16514	52.571	181.	198.	173.6	80883.	75439.	314.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

90.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV	CP	S*	H*	U	VEL SND M/SEC
				- - J/MOL /DEG K) - -			- - J/MOL	- -	
250.00	10.61422	8.9031	532.74	91.	124.	-7.1	-962.	-1810.	1117.
260.00	10.44566	8.3396	490.30	93.	127.	-2.2	293.	-568.	1073.
270.00	10.27387	7.7982	449.30	94.	129.	2.6	1570.	694.	1028.
280.00	10.09837	7.2783	410.00	96.	131.	7.4	2871.	1979.	983.
290.00	9.91867	6.7793	372.56	98.	134.	12.0	4197.	3289.	938.
300.00	9.73426	6.3010	337.05	100.	137.	16.6	5551.	4627.	893.
310.00	9.54459	5.8429	303.53	102.	140.	21.2	6936.	5993.	848.
320.00	9.34905	5.4044	271.98	104.	143.	25.7	8353.	7390.	803.
330.00	9.14693	4.9852	242.39	106.	147.	30.1	9803.	8819.	759.
340.00	8.93741	4.5846	214.70	109.	150.	34.6	11290.	10283.	715.
350.00	8.71951	4.2020	188.89	111.	154.	39.0	12814.	11782.	671.
360.00	8.49205	3.8367	164.88	114.	158.	43.4	14377.	13317.	628.
370.00	8.25360	3.4880	142.65	116.	163.	47.8	15981.	14891.	586.
380.00	8.00237	3.1553	122.15	119.	167.	52.2	17630.	16505.	544.
390.00	7.73615	2.8379	103.36	121.	172.	56.6	19326.	18163.	502.
400.00	7.45221	2.5353	86.273	124.	177.	61.0	21074.	19866.	461.
410.00	7.14717	2.2473	70.915	126.	184.	65.5	22878.	21619.	421.
420.00	6.81698	1.9738	57.344	129.	190.	70.0	24746.	23426.	382.
430.00	6.45732	1.7158	45.663	131.	198.	74.5	26686.	25292.	344.
440.00	6.06470	1.4752	36.024	134.	206.	79.2	28706.	27222.	309.
450.00	5.63962	1.2556	28.592	136.	214.	83.9	30809.	29213.	278.
460.00	5.19180	1.0619	23.459	139.	221.	88.7	32986.	31253.	253.
470.00	4.74369	.89882	20.499	141.	223.	93.4	35209.	33311.	236.
480.00	4.32402	.76734	19.314	143.	221.	98.1	37432.	35350.	227.
490.00	3.95357	.66421	19.382	144.	216.	102.6	39617.	37340.	223.
500.00	3.63841	.58389	20.241	146.	210.	106.9	41744.	39270.	224.
510.00	3.37414	.52088	21.566	148.	204.	111.0	43812.	41145.	226.
520.00	3.15241	.47073	23.150	149.	199.	114.9	45829.	42974.	231.
530.00	2.96486	.43012	24.870	151.	196.	118.7	47805.	44770.	236.
540.00	2.80443	.39668	26.654	153.	193.	122.3	49752.	46543.	241.
550.00	2.66560	.36870	28.460	155.	192.	125.9	51676.	48300.	246.
560.00	2.54410	.34494	30.261	156.	190.	129.3	53587.	50049.	252.
570.00	2.43668	.32451	32.046	158.	190.	132.7	55488.	51794.	257.
580.00	2.34084	.30674	33.806	160.	190.	136.0	57385.	53540.	262.
590.00	2.25463	.29113	35.538	162.	190.	139.2	59280.	55288.	268.
600.00	2.17654	.27729	37.239	164.	190.	142.4	61177.	57042.	273.
- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
610.00	2.10535	.26492	38.910	166.	190.	145.6	63078.	58803.	277.
620.00	2.04008	.25378	40.552	167.	191.	148.7	64985.	60573.	282.
630.00	1.97995	.24370	42.164	169.	192.	151.7	66898.	62352.	287.
640.00	1.92429	.23451	43.749	171.	193.	154.7	68819.	64142.	291.
650.00	1.87257	.22611	45.307	173.	193.	157.7	70749.	65943.	296.
660.00	1.82434	.21838	46.841	174.	194.	160.7	72688.	67755.	300.
670.00	1.77921	.21124	48.350	176.	195.	163.6	74638.	69579.	304.
680.00	1.73686	.20462	49.837	178.	197.	166.5	76598.	71416.	308.
690.00	1.69701	.19847	51.303	179.	198.	169.4	78569.	73265.	312.
700.00	1.65942	.19273	52.748	181.	199.	172.3	80551.	75127.	316.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV - - J/MOL	CP /DEG K)	S* - -	H* - - J/MOL	U - -	VEL SND M/SEC
250.00	10.63276	9.0432	546.00	91.	124.	-7.2	-905.	-1845.	1132.
260.00	10.46579	8.4698	502.99	93.	126.	-2.3	349.	-607.	1087.
270.00	10.29583	7.9208	461.54	94.	129.	2.5	1623.	652.	1042.
280.00	10.12241	7.3951	421.88	96.	131.	7.2	2921.	1933.	997.
290.00	9.94510	6.8920	384.15	97.	134.	11.8	4244.	3239.	952.
300.00	9.76344	6.4108	348.42	99.	137.	16.4	5595.	4571.	907.
310.00	9.57694	5.9508	314.72	102.	140.	20.9	6976.	5931.	863.
320.00	9.38508	5.5114	283.03	104.	143.	25.4	8388.	7322.	818.
330.00	9.18727	5.0922	253.34	106.	146.	29.9	9833.	8744.	775.
340.00	8.98284	4.6923	225.59	109.	150.	34.3	11312.	10199.	731.
350.00	8.77098	4.3113	199.73	111.	153.	38.7	12828.	11688.	689.
360.00	8.55079	3.9483	175.70	114.	157.	43.1	14381.	13211.	647.
370.00	8.32116	3.6028	153.47	116.	161.	47.4	15973.	14771.	606.
380.00	8.08079	3.2741	132.97	119.	165.	51.8	17606.	16369.	565.
390.00	7.82814	2.9616	114.18	121.	170.	56.1	19283.	18005.	525.
400.00	7.56138	2.6649	97.082	123.	175.	60.5	21005.	19683.	486.
410.00	7.27840	2.3837	81.672	126.	180.	64.9	22777.	21403.	448.
420.00	6.97688	2.1179	67.975	128.	185.	69.3	24602.	23169.	411.
430.00	6.65455	1.8682	56.040	131.	191.	73.7	26485.	24983.	375.
440.00	6.30982	1.6356	45.938	133.	198.	78.2	28430.	26845.	342.
450.00	5.94312	1.4219	37.749	136.	204.	82.7	30437.	28755.	312.
460.00	5.55885	1.2298	31.521	138.	209.	87.2	32504.	30705.	287.
470.00	5.16729	1.0619	27.207	140.	213.	91.8	34618.	32682.	267.
480.00	4.78394	.91960	24.614	142.	214.	96.3	36756.	34666.	253.
490.00	4.42494	.80226	23.422	144.	213.	100.7	38893.	36633.	244.
500.00	4.10140	.70706	23.264	146.	210.	104.9	41007.	38569.	240.
510.00	3.81730	.63021	23.818	148.	206.	109.1	43086.	40467.	239.
520.00	3.57104	.56793	24.835	149.	202.	113.0	45128.	42328.	241.
530.00	3.35826	.51700	26.145	151.	199.	116.8	47136.	44158.	243.
540.00	3.17387	.47486	27.634	153.	197.	120.5	49115.	45964.	247.
550.00	3.01309	.43956	29.227	155.	195.	124.1	51072.	47753.	252.
560.00	2.87184	.40962	30.877	157.	193.	127.6	53013.	49531.	256.
570.00	2.74676	.38395	32.554	158.	193.	131.1	54943.	51302.	261.
580.00	2.63516	.36168	34.239	160.	192.	134.4	56866.	53071.	266.
590.00	2.53485	.34219	35.919	162.	192.	137.7	58786.	54841.	271.
600.00	2.44410	.32498	37.586	164.	192.	140.9	60705.	56614.	275.
610.00	2.36151	.30966	39.237	166.	192.	144.1	62627.	58392.	280.
620.00	2.28592	.29592	40.868	167.	193.	147.2	64552.	60178.	285.
630.00	2.21640	.28353	42.478	169.	193.	150.3	66483.	61971.	289.
640.00	2.15219	.27229	44.066	171.	194.	153.4	68421.	63774.	293.
650.00	2.09262	.26203	45.632	173.	195.	156.4	70366.	65587.	298.
660.00	2.03718	.25263	47.177	174.	196.	159.4	72320.	67411.	302.
670.00	1.98539	.24397	48.701	176.	197.	162.3	74282.	69246.	306.
680.00	1.93686	.23598	50.205	178.	198.	165.2	76255.	71092.	310.
690.00	1.89128	.22856	51.689	179.	199.	168.1	78238.	72950.	314.
700.00	1.84834	.22166	53.154	181.	200.	171.0	80231.	74820.	318.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

120.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV - - J/MOL	CP /DEG K)	S* - -	H* - - J/MOL	U - -	VEL SND M/SEC
250.00	10.66854	9.3118	572.01	91.	124.	-7.5	-789.	-1914.	1160.
260.00	10.50460	8.7193	527.90	92.	126.	-2.6	460.	-682.	1115.
270.00	10.33807	8.1555	485.56	94.	128.	2.2	1731.	570.	1070.
280.00	10.16855	7.6187	445.18	95.	130.	6.9	3024.	1844.	1025.
290.00	9.99568	7.1071	406.87	97.	133.	11.5	4342.	3141.	980.
300.00	9.81907	6.6198	370.67	99.	136.	16.0	5686.	4464.	935.
310.00	9.63837	6.1558	336.60	101.	139.	20.5	7059.	5814.	891.
320.00	9.45317	5.7142	304.62	103.	142.	25.0	8462.	7193.	848.
330.00	9.26305	5.2942	274.70	106.	145.	29.4	9897.	8601.	805.
340.00	9.06755	4.8949	246.77	108.	148.	33.8	11364.	10041.	763.
350.00	8.86615	4.5158	220.78	111.	152.	38.1	12866.	11512.	722.
360.00	8.65828	4.1560	196.67	113.	155.	42.5	14402.	13016.	681.
370.00	8.44328	3.8148	174.36	116.	159.	46.8	15973.	14552.	642.
380.00	8.22044	3.4916	153.80	118.	163.	51.1	17582.	16122.	604.
390.00	7.98896	3.1858	134.95	121.	167.	55.3	19228.	17725.	566.
400.00	7.74799	2.8969	117.75	123.	170.	59.6	20912.	19364.	530.
410.00	7.49663	2.6246	102.19	125.	175.	63.9	22638.	21037.	495.
420.00	7.23406	2.3685	88.241	128.	179.	68.1	24404.	22746.	461.
430.00	6.95962	2.1289	75.895	130.	183.	72.4	26214.	24490.	429.
440.00	6.67308	1.9057	65.154	132.	188.	76.6	28067.	26269.	398.
450.00	6.37498	1.6997	56.017	135.	192.	80.9	29965.	28082.	370.
460.00	6.06707	1.5115	48.473	137.	196.	85.2	31904.	29926.	345.
470.00	5.75280	1.3418	42.485	139.	199.	89.4	33880.	31794.	324.
480.00	5.43747	1.1911	37.969	141.	202.	93.6	35888.	33681.	306.
490.00	5.12774	1.0596	34.789	143.	204.	97.8	37916.	35576.	291.
500.00	4.83053	.94633	32.759	145.	204.	101.9	39954.	37470.	281.
510.00	4.55161	.84991	31.671	147.	203.	106.0	41992.	39356.	274.
520.00	4.29466	.76832	31.319	149.	202.	109.9	44022.	41227.	270.
530.00	4.06110	.69939	31.522	151.	201.	113.8	46038.	43083.	269.
540.00	3.85055	.64103	32.132	153.	200.	117.5	48041.	44924.	269.
550.00	3.66147	.59139	33.036	155.	198.	121.2	50029.	46752.	270.
560.00	3.49178	.54889	34.147	157.	197.	124.7	52006.	48569.	272.
570.00	3.33924	.51224	35.403	158.	196.	128.2	53973.	50380.	275.
580.00	3.20172	.48041	36.760	160.	196.	131.6	55934.	52186.	278.
590.00	3.07726	.45254	38.184	162.	196.	135.0	57890.	53990.	281.
600.00	2.96416	.42798	39.653	164.	195.	138.2	59845.	55796.	285.
- - -	- - -	- - -	- - -	- -	- -	- -	- - -	- - -	- -
610.00	2.86094	.40617	41.150	166.	196.	141.5	61799.	57605.	289.
620.00	2.76636	.38669	42.661	167.	196.	144.6	63756.	59419.	293.
630.00	2.67933	.36918	44.180	169.	196.	147.8	65717.	61238.	297.
640.00	2.59895	.35336	45.700	171.	197.	150.9	67683.	63065.	301.
650.00	2.52445	.33899	47.215	173.	198.	153.9	69654.	64901.	305.
660.00	2.45516	.32587	48.724	174.	198.	157.0	71633.	66745.	309.
670.00	2.39051	.31385	50.224	176.	199.	159.9	73619.	68600.	313.
680.00	2.33003	.30278	51.714	178.	200.	162.9	75614.	70464.	316.
690.00	2.27328	.29256	53.191	179.	201.	165.8	77618.	72340.	320.
700.00	2.21991	.28309	54.657	181.	202.	168.7	79632.	74226.	324.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

140.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV - - J/MOL	CP /DEG K)	S* - -	H* - - J/MOL	U - -	VEL SND M/SEC
250.00	10.70275	9.5663	597.42	90.	124.	-7.8	-673.	-1981.	1187.
260.00	10.54164	8.9555	552.24	92.	126.	-2.9	574.	-754.	1141.
270.00	10.37829	8.3776	509.03	93.	128.	1.8	1840.	491.	1096.
280.00	10.21236	7.8298	467.93	95.	130.	6.5	3129.	1758.	1051.
290.00	10.04353	7.3099	429.04	97.	133.	11.1	4442.	3048.	1006.
300.00	9.87150	6.8165	392.36	99.	135.	15.7	5780.	4362.	961.
310.00	9.69597	6.3481	357.89	101.	138.	20.2	7146.	5702.	918.
320.00	9.51665	5.9037	325.60	103.	141.	24.6	8542.	7071.	875.
330.00	9.33323	5.4822	295.42	106.	144.	29.0	9968.	8468.	833.
340.00	9.14539	5.0827	267.28	108.	147.	33.3	11425.	9894.	792.
350.00	8.95279	4.7044	241.12	110.	151.	37.6	12914.	11350.	752.
360.00	8.75506	4.3463	216.86	113.	154.	41.9	14436.	12837.	713.
370.00	8.55182	4.0077	194.42	115.	157.	46.2	15991.	14354.	675.
380.00	8.34266	3.6878	173.75	118.	161.	50.4	17580.	15902.	638.
390.00	8.12718	3.3861	154.77	120.	164.	54.6	19203.	17480.	603.
400.00	7.90496	3.1020	137.43	123.	168.	58.8	20861.	19090.	568.
410.00	7.67564	2.8348	121.68	125.	171.	63.0	22553.	20729.	535.
420.00	7.43894	2.5843	107.48	127.	175.	67.2	24281.	22399.	503.
430.00	7.19474	2.3502	94.791	130.	178.	71.3	26045.	24099.	473.
440.00	6.94318	2.1322	83.582	132.	182.	75.5	27844.	25828.	445.
450.00	6.68480	1.9304	73.820	134.	185.	79.6	29678.	27584.	418.
460.00	6.42065	1.7447	65.467	136.	188.	83.7	31546.	29365.	394.
470.00	6.15250	1.5752	58.474	139.	191.	87.8	33445.	31169.	373.
480.00	5.88283	1.4219	52.775	141.	194.	91.8	35372.	32992.	354.
490.00	5.61479	1.2845	48.280	143.	196.	95.9	37322.	34829.	338.
500.00	5.35193	1.1626	44.877	145.	198.	99.8	39291.	36675.	324.
510.00	5.09779	1.0553	42.434	147.	198.	103.8	41271.	38525.	314.
520.00	4.85545	.96151	40.810	149.	199.	107.6	43259.	40375.	306.
530.00	4.62719	.87987	39.866	151.	199.	111.4	45248.	42223.	301.
540.00	4.41432	.80896	39.472	153.	199.	115.1	47237.	44066.	297.
550.00	4.21730	.74737	39.513	155.	198.	118.8	49223.	45904.	295.
560.00	4.03585	.69376	39.896	157.	198.	122.3	51206.	47737.	295.
570.00	3.86921	.64694	40.543	158.	198.	125.8	53185.	49567.	295.
580.00	3.71633	.60589	41.391	160.	198.	129.3	55161.	51394.	296.
590.00	3.57604	.56973	42.393	162.	197.	132.7	57136.	53221.	298.
600.00	3.44715	.53770	43.511	164.	197.	136.0	59111.	55049.	300.
- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
610.00	3.32851	.50919	44.716	166.	198.	139.2	61086.	56880.	303.
620.00	3.21907	.48368	45.986	168.	198.	142.5	63064.	58715.	306.
630.00	3.11785	.46075	47.304	169.	198.	145.6	65046.	60556.	309.
640.00	3.02399	.44003	48.657	171.	199.	148.8	67032.	62402.	312.
650.00	2.93674	.42123	50.034	173.	199.	151.8	69024.	64257.	315.
660.00	2.85541	.40409	51.428	174.	200.	154.9	71022.	66119.	319.
670.00	2.77940	.38840	52.832	176.	201.	157.9	73027.	67990.	322.
680.00	2.70821	.37400	54.243	178.	202.	160.9	75040.	69870.	325.
690.00	2.64136	.36072	55.657	179.	203.	163.8	77061.	71761.	329.
700.00	2.57846	.34843	57.070	181.	203.	166.8	79091.	73662.	332.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV	CP	S*	H*	U	VEL SND M/SEC
				- - J/MOL	/DEG K) - -		- - J/MOL	- -	
250.00	10.73554	9.8082	622.27	90.	123.	-8.1	-555.	-2046.	1213.
260.00	10.57709	9.1799	576.05	91.	125.	-3.2	688.	-825.	1166.
270.00	10.41672	8.5882	531.98	93.	127.	1.5	1951.	415.	1120.
280.00	10.25412	8.0297	490.18	95.	130.	6.2	3236.	1676.	1075.
290.00	10.08901	7.5017	450.70	96.	132.	10.8	4544.	2958.	1030.
300.00	9.92114	7.0021	413.54	99.	135.	15.3	5877.	4264.	986.
310.00	9.75029	6.5293	378.67	101.	137.	19.8	7237.	5596.	943.
320.00	9.57622	6.0813	346.04	103.	140.	24.2	8626.	6955.	901.
330.00	9.39871	5.6583	315.58	105.	143.	28.6	10044.	8341.	859.
340.00	9.21755	5.2579	287.21	108.	146.	32.9	11492.	9756.	819.
350.00	9.03250	4.8795	260.85	110.	149.	37.2	12971.	11200.	780.
360.00	8.84334	4.5222	236.41	113.	153.	41.4	14481.	12672.	742.
370.00	8.64985	4.1850	213.81	115.	156.	45.6	16023.	14173.	705.
380.00	8.45180	3.8672	192.98	118.	159.	49.8	17596.	15703.	670.
390.00	8.24900	3.5680	173.84	120.	162.	54.0	19201.	17261.	635.
400.00	8.04126	3.2867	156.33	123.	165.	58.2	20837.	18848.	602.
410.00	7.82847	3.0228	140.37	125.	168.	62.3	22506.	20462.	571.
420.00	7.61059	2.7755	125.92	127.	172.	66.4	24206.	22104.	541.
430.00	7.38769	2.5446	112.93	130.	175.	70.4	25937.	23772.	512.
440.00	7.16004	2.3296	101.33	132.	178.	74.5	27700.	25465.	485.
450.00	6.92811	2.1301	91.093	134.	181.	78.5	29492.	27183.	460.
460.00	6.69267	1.9459	82.153	136.	184.	82.5	31314.	28923.	436.
470.00	6.45481	1.7766	74.458	138.	186.	86.5	33163.	30685.	415.
480.00	6.21599	1.6220	67.943	141.	189.	90.5	35038.	32464.	396.
490.00	5.97799	1.4816	62.533	143.	191.	94.4	36936.	34259.	379.
500.00	5.74282	1.3550	58.143	145.	193.	98.2	38853.	36067.	365.
510.00	5.51261	1.2414	54.676	147.	194.	102.1	40787.	37884.	353.
520.00	5.28939	1.1400	52.029	149.	195.	105.8	42734.	39709.	343.
530.00	5.07493	1.0499	50.098	151.	196.	109.6	44690.	41537.	335.
540.00	4.87062	.97010	48.777	153.	197.	113.2	46654.	43369.	329.
550.00	4.67739	.89949	47.971	155.	197.	116.9	48622.	45201.	324.
560.00	4.49569	.83704	47.592	157.	197.	120.4	50594.	47035.	321.
570.00	4.32559	.78174	47.562	158.	198.	123.9	52569.	48870.	319.
580.00	4.16684	.73268	47.818	160.	198.	127.3	54546.	50706.	319.
590.00	4.01896	.68905	48.303	162.	198.	130.7	56525.	52544.	319.
600.00	3.88132	.65011	48.974	164.	198.	134.1	58507.	54385.	319.
610.00	3.75322	.61525	49.792	166.	199.	137.3	60492.	56229.	320.
620.00	3.63394	.58392	50.728	168.	199.	140.6	62481.	58078.	322.
630.00	3.52277	.55566	51.758	169.	200.	143.8	64475.	59933.	324.
640.00	3.41901	.53006	52.862	171.	200.	146.9	66474.	61794.	326.
650.00	3.32202	.50680	54.025	173.	201.	150.0	68479.	63662.	329.
660.00	3.23120	.48557	55.235	175.	201.	153.1	70490.	65538.	331.
670.00	3.14603	.46613	56.480	176.	202.	156.1	72508.	67423.	334.
680.00	3.06599	.44828	57.753	178.	203.	159.1	74535.	69316.	337.
690.00	2.99065	.43182	59.047	179.	204.	162.1	76569.	71219.	340.
700.00	2.91960	.41661	60.358	181.	205.	165.0	78612.	73132.	343.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

180.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV	CP	S*	H*	U	VEL SND M/SEC
				- - J/MOL /DEG K) - -			- - J/MOL - -		
250.00	10.76707	10.038	646.63	90.	123.	-8.4	-437.	-2109.	1237.
260.00	10.61112	9.3934	599.39	91.	125.	-3.5	804.	-893.	1190.
270.00	10.45354	8.7885	554.48	93.	127.	1.3	2064.	342.	1144.
280.00	10.29403	8.2197	511.98	94.	129.	5.9	3345.	1596.	1098.
290.00	10.13237	7.6837	471.92	96.	132.	10.5	4648.	2872.	1054.
300.00	9.96833	7.1779	434.27	98.	134.	15.0	5977.	4171.	1010.
310.00	9.80173	6.7005	398.99	101.	137.	19.4	7332.	5495.	967.
320.00	9.63240	6.2496	366.02	103.	140.	23.8	8714.	6845.	925.
330.00	9.46018	5.8240	335.26	105.	143.	28.2	10125.	8222.	884.
340.00	9.28492	5.4222	306.63	108.	146.	32.5	11565.	9627.	844.
350.00	9.10647	5.0433	280.04	110.	149.	36.7	13035.	11059.	806.
360.00	8.92470	4.6860	255.40	113.	152.	40.9	14535.	12519.	769.
370.00	8.73949	4.3495	232.62	115.	155.	45.1	16066.	14006.	733.
380.00	8.55072	4.0328	211.61	118.	158.	49.3	17626.	15521.	698.
390.00	8.35831	3.7350	192.29	120.	161.	53.4	19216.	17062.	665.
400.00	8.16223	3.4555	174.58	122.	163.	57.5	20836.	18631.	633.
410.00	7.96246	3.1935	158.42	125.	166.	61.6	22485.	20225.	603.
420.00	7.75909	2.9482	143.72	127.	169.	65.6	24164.	21844.	574.
430.00	7.55227	2.7192	130.44	129.	172.	69.7	25871.	23488.	546.
440.00	7.34229	2.5059	118.51	132.	175.	73.7	27607.	25155.	520.
450.00	7.12955	2.3077	107.87	134.	178.	77.6	29370.	26845.	496.
460.00	6.91466	2.1242	98.464	136.	180.	81.6	31159.	28556.	474.
470.00	6.69838	1.9549	90.226	138.	183.	85.5	32974.	30287.	453.
480.00	6.48169	1.7993	83.094	140.	185.	89.3	34812.	32035.	434.
490.00	6.26572	1.6569	76.997	143.	187.	93.2	36673.	33800.	417.
500.00	6.05175	1.5272	71.862	145.	189.	97.0	38553.	35578.	402.
510.00	5.84114	1.4095	67.610	147.	191.	100.7	40451.	37369.	389.
520.00	5.63524	1.3031	64.156	149.	192.	104.4	42364.	39170.	378.
530.00	5.43530	1.2073	61.417	151.	193.	108.1	44291.	40980.	368.
540.00	5.24242	1.1212	59.307	153.	194.	111.7	46229.	42796.	360.
550.00	5.05747	1.0439	57.747	155.	195.	115.3	48177.	44618.	354.
560.00	4.88104	.97465	56.660	157.	196.	118.8	50133.	46445.	349.
570.00	4.71351	.91260	55.976	158.	197.	122.3	52096.	48277.	346.
580.00	4.55498	.85695	55.634	160.	197.	125.7	54065.	50113.	343.
590.00	4.40538	.80698	55.578	162.	198.	129.1	56040.	51954.	341.
600.00	4.26449	.76203	55.763	164.	198.	132.4	58021.	53800.	341.
- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	-
610.00	4.13194	.72149	56.147	166.	199.	135.7	60008.	55651.	340.
620.00	4.00733	.68485	56.696	168.	200.	139.0	62000.	57508.	341.
630.00	3.89020	.65163	57.383	169.	200.	142.1	63999.	59372.	342.
640.00	3.78006	.62143	58.184	171.	201.	145.3	66004.	61242.	343.
650.00	3.67643	.59389	59.078	173.	202.	148.4	68016.	63120.	344.
660.00	3.57885	.56870	60.050	175.	202.	151.5	70036.	65006.	346.
670.00	3.48688	.54559	61.084	176.	203.	154.6	72063.	66900.	348.
680.00	3.40008	.52433	62.171	178.	204.	157.6	74098.	68804.	350.
690.00	3.31808	.50471	63.301	180.	205.	160.6	76141.	70716.	352.
700.00	3.24050	.48657	64.466	181.	206.	163.5	78193.	72639.	355.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

T	DENSITY	DP/DT	DP/DD	CV	CP	S*	H*	U	VEL SND
DEG K	MOL/DM3	BAR/K	BAR/(MOL/DM3)	- - J/MOL /DEG K) - -			- - J/MOL - -		M/SEC
250.00	10.79744	10.258	670.53	89.	123.	-8.6	-318.	-2170.	1260.
260.00	10.64387	9.5970	622.29	91.	125.	-3.8	920.	-959.	1213.
270.00	10.48891	8.9794	576.55	92.	127.	1.0	2177.	271.	1166.
280.00	10.33230	8.4006	533.36	94.	129.	5.6	3455.	1519.	1121.
290.00	10.17384	7.8567	492.72	96.	131.	10.2	4755.	2789.	1076.
300.00	10.01334	7.3449	454.59	98.	134.	14.7	6079.	4081.	1032.
310.00	9.85065	6.8628	418.90	100.	136.	19.1	7429.	5398.	989.
320.00	9.68563	6.4085	385.56	103.	139.	23.5	8805.	6741.	948.
330.00	9.51818	5.9804	354.50	105.	142.	27.8	10210.	8109.	907.
340.00	9.34820	5.5770	325.60	108.	145.	32.1	11644.	9504.	868.
350.00	9.17559	5.1971	298.78	110.	148.	36.3	13106.	10926.	830.
360.00	9.00029	4.8394	273.92	113.	151.	40.5	14597.	12375.	794.
370.00	8.82223	4.5030	250.93	115.	153.	44.7	16118.	13851.	759.
380.00	8.64138	4.1867	229.73	118.	156.	48.8	17667.	15352.	725.
390.00	8.45774	3.8898	210.21	120.	159.	52.9	19245.	16880.	693.
400.00	8.27132	3.6112	192.30	122.	162.	57.0	20851.	18433.	662.
410.00	8.08218	3.3503	175.92	125.	165.	61.0	22485.	20011.	632.
420.00	7.89047	3.1062	160.98	127.	168.	65.0	24147.	21612.	604.
430.00	7.69636	2.8783	147.43	129.	170.	69.0	25835.	23237.	578.
440.00	7.50013	2.6658	135.20	132.	173.	72.9	27550.	24884.	552.
450.00	7.30214	2.4683	124.21	134.	175.	76.8	29291.	26552.	529.
460.00	7.10287	2.2850	114.41	136.	178.	80.7	31056.	28240.	507.
470.00	6.90290	2.1154	105.72	138.	180.	84.6	32845.	29948.	487.
480.00	6.70293	1.9589	98.088	140.	182.	88.4	34657.	31673.	468.
490.00	6.50376	1.8150	91.444	143.	184.	92.1	36489.	33414.	451.
500.00	6.30626	1.6831	85.718	145.	186.	95.9	38342.	35170.	436.
510.00	6.11136	1.5625	80.838	147.	188.	99.6	40213.	36940.	422.
520.00	5.92001	1.4525	76.735	149.	190.	103.3	42100.	38721.	410.
530.00	5.73308	1.3524	73.333	151.	191.	106.9	44002.	40514.	400.
540.00	5.55141	1.2617	70.563	153.	192.	110.5	45918.	42315.	391.
550.00	5.37569	1.1794	68.355	155.	193.	114.0	47846.	44126.	383.
560.00	5.20648	1.1050	66.641	157.	194.	117.5	49785.	45944.	377.
570.00	5.04419	1.0376	65.361	158.	195.	120.9	51735.	47770.	372.
580.00	4.88905	.97661	64.458	160.	196.	124.4	53693.	49602.	368.
590.00	4.74118	.92139	63.880	162.	197.	127.7	55660.	51442.	365.
600.00	4.60055	.87134	63.582	164.	198.	131.0	57635.	53288.	363.
610.00	4.46704	.82589	63.523	166.	199.	134.3	59618.	55141.	362.
620.00	4.34044	.78457	63.669	168.	199.	137.5	61609.	57001.	361.
630.00	4.22049	.74690	63.988	169.	200.	140.7	63608.	58869.	361.
640.00	4.10688	.71250	64.456	171.	201.	143.9	65615.	60745.	361.
650.00	3.99930	.68101	65.049	173.	202.	147.0	67630.	62629.	361.
660.00	3.89739	.65212	65.749	175.	203.	150.1	69653.	64522.	362.
670.00	3.80082	.62554	66.538	176.	204.	153.2	71685.	66423.	364.
680.00	3.70925	.60103	67.405	178.	204.	156.2	73725.	68333.	365.
690.00	3.62238	.57837	68.336	180.	205.	159.2	75774.	70253.	367.
700.00	3.53988	.55738	69.321	181.	206.	162.2	77832.	72183.	368.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

250.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV J/MOL /DEG K	CP J/MOL /DEG K	S* J/MOL /DEG K	H* J/MOL	U J/MOL	VEL SND M/SEC
250.00	10.86894	10.767	728.50	89.	122.	-9.3	-16.	-2317.	1315.
260.00	10.72081	10.068	677.85	90.	124.	-4.4	1216.	-1116.	1266.
270.00	10.57181	9.4203	630.10	92.	126.	.3	2466.	102.	1219.
280.00	10.42173	8.8178	585.23	94.	128.	4.9	3736.	1338.	1172.
290.00	10.27042	8.2551	543.16	96.	130.	9.4	5028.	2594.	1127.
300.00	10.11773	7.7285	503.81	98.	133.	13.9	6342.	3872.	1084.
310.00	9.96358	7.2349	467.06	100.	135.	18.3	7682.	5173.	1041.
320.00	9.80791	6.7718	432.82	103.	138.	22.6	9047.	6498.	1000.
330.00	9.65066	6.3370	400.96	105.	141.	26.9	10439.	7848.	961.
340.00	9.49181	5.9287	371.36	108.	143.	31.1	11858.	9224.	923.
350.00	9.33136	5.5453	343.89	110.	146.	35.3	13304.	10625.	886.
360.00	9.16931	5.1855	318.45	113.	149.	39.5	14778.	12052.	851.
370.00	9.00570	4.8478	294.91	115.	151.	43.6	16279.	13503.	817.
380.00	8.84057	4.5310	273.17	118.	154.	47.7	17807.	14979.	785.
390.00	8.67399	4.2342	253.13	120.	157.	51.7	19361.	16479.	754.
400.00	8.50606	3.9561	234.69	122.	159.	55.7	20942.	18003.	725.
410.00	8.33690	3.6959	217.75	125.	162.	59.7	22548.	19550.	697.
420.00	8.16666	3.4526	202.24	127.	164.	63.6	24179.	21118.	670.
430.00	7.99554	3.2253	188.06	130.	167.	67.5	25835.	22708.	645.
440.00	7.82374	3.0133	175.15	132.	169.	71.4	27515.	24319.	622.
450.00	7.65155	2.8157	163.42	134.	171.	75.2	29217.	25950.	599.
460.00	7.47926	2.6318	152.80	136.	174.	79.0	30942.	27599.	579.
470.00	7.30720	2.4609	143.23	138.	176.	82.7	32688.	29267.	559.
480.00	7.13577	2.3022	134.64	141.	178.	86.4	34456.	30952.	541.
490.00	6.96536	2.1553	126.96	143.	180.	90.1	36243.	32654.	524.
500.00	6.79640	2.0192	120.14	145.	182.	93.8	38050.	34372.	509.
510.00	6.62935	1.8935	114.10	147.	183.	97.4	39875.	36104.	495.
520.00	6.46463	1.7775	108.79	149.	185.	101.0	41717.	37850.	482.
530.00	6.30270	1.6706	104.15	151.	187.	104.5	43576.	39610.	471.
540.00	6.14396	1.5721	100.13	153.	188.	108.0	45451.	41382.	460.
550.00	5.98879	1.4815	96.665	155.	190.	111.5	47341.	43167.	451.
560.00	5.83753	1.3982	93.711	157.	191.	114.9	49246.	44963.	443.
570.00	5.69046	1.3216	91.217	159.	192.	118.3	51163.	46770.	436.
580.00	5.54782	1.2512	89.137	161.	194.	121.7	53094.	48588.	430.
590.00	5.40977	1.1865	87.428	162.	195.	125.0	55038.	50416.	425.
600.00	5.27642	1.1270	86.053	164.	196.	128.3	56993.	52255.	420.
610.00	5.14785	1.0722	84.974	166.	197.	131.5	58960.	54104.	417.
620.00	5.02405	1.0218	84.159	168.	198.	134.7	60939.	55963.	414.
630.00	4.90501	.97525	83.578	170.	199.	137.9	62928.	57831.	411.
640.00	4.79065	.93231	83.205	171.	201.	141.1	64929.	59710.	409.
650.00	4.68087	.89262	83.017	173.	202.	144.2	66940.	61599.	408.
660.00	4.57556	.85589	82.991	175.	203.	147.3	68961.	63498.	407.
670.00	4.47456	.82183	83.109	177.	204.	150.3	70993.	65406.	406.
680.00	4.37773	.79021	83.355	178.	205.	153.4	73036.	67325.	406.
690.00	4.28490	.76081	83.713	180.	206.	156.4	75089.	69255.	406.
700.00	4.19591	.73342	84.170	181.	207.	159.3	77152.	71194.	406.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

300.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV - -	CP J/MOL /DEG K)	S* - -	H* - -	U J/MOL - -	VEL SND M/SEC
250.00	10.93506	11.225	784.26	88.	122.	-9.9	289.	-2454.	1365.
260.00	10.79179	10.492	731.32	90.	124.	-5.1	1517.	-1263.	1315.
270.00	10.64807	9.8168	681.65	92.	125.	-.4	2762.	-56.	1266.
280.00	10.50371	9.1923	635.14	94.	127.	4.2	4025.	1169.	1219.
290.00	10.35857	8.6121	591.67	96.	130.	8.7	5310.	2414.	1174.
300.00	10.21256	8.0715	551.10	98.	132.	13.2	6617.	3679.	1130.
310.00	10.06563	7.5667	513.31	100.	134.	17.5	7948.	4967.	1088.
320.00	9.91774	7.0948	478.15	103.	137.	21.8	9303.	6278.	1047.
330.00	9.76888	6.6530	445.47	105.	139.	26.1	10685.	7614.	1008.
340.00	9.61905	6.2393	415.13	108.	142.	30.3	12093.	8974.	971.
350.00	9.46828	5.8518	386.99	110.	145.	34.4	13527.	10359.	935.
360.00	9.31663	5.4887	360.92	113.	147.	38.6	14988.	11768.	901.
370.00	9.16416	5.1486	336.80	115.	150.	42.6	16474.	13201.	868.
380.00	9.01092	4.8301	314.50	118.	153.	46.7	17987.	14658.	837.
390.00	8.85703	4.5319	293.91	120.	155.	50.7	19525.	16138.	807.
400.00	8.70258	4.2528	274.93	123.	157.	54.6	21087.	17640.	779.
410.00	8.54769	3.9918	257.44	125.	160.	58.5	22674.	19165.	752.
420.00	8.39252	3.7477	241.37	128.	162.	62.4	24285.	20711.	727.
430.00	8.23721	3.5197	226.61	130.	165.	66.3	25919.	22277.	703.
440.00	8.08194	3.3068	213.09	132.	167.	70.1	27576.	23864.	680.
450.00	7.92692	3.1080	200.73	134.	169.	73.8	29254.	25470.	659.
460.00	7.77234	2.9227	189.44	137.	171.	77.6	30954.	27094.	639.
470.00	7.61844	2.7501	179.17	139.	173.	81.3	32674.	28737.	620.
480.00	7.46544	2.5893	169.84	141.	175.	84.9	34415.	30396.	602.
490.00	7.31360	2.4397	161.38	143.	177.	88.6	36175.	32073.	586.
500.00	7.16317	2.3006	153.74	145.	179.	92.2	37954.	33766.	571.
510.00	7.01441	2.1713	146.86	147.	181.	95.7	39751.	35474.	557.
520.00	6.86756	2.0512	140.68	149.	182.	99.2	41566.	37197.	544.
530.00	6.72288	1.9397	135.15	151.	184.	102.7	43397.	38935.	532.
540.00	6.58059	1.8363	130.22	153.	186.	106.2	45246.	40687.	521.
550.00	6.44091	1.7404	125.84	155.	187.	109.6	47110.	42452.	511.
560.00	6.30405	1.6514	121.97	157.	189.	113.0	48990.	44231.	502.
570.00	6.17018	1.5689	118.56	159.	190.	116.3	50885.	46023.	494.
580.00	6.03944	1.4923	115.58	161.	192.	119.7	52794.	47827.	487.
590.00	5.91197	1.4213	112.98	163.	193.	123.0	54718.	49643.	480.
600.00	5.78787	1.3554	110.74	165.	194.	126.2	56655.	51472.	474.
610.00	5.66719	1.2942	108.82	166.	196.	129.4	58606.	53312.	469.
620.00	5.55000	1.2374	107.19	168.	197.	132.6	60569.	55164.	465.
630.00	5.43630	1.1846	105.82	170.	198.	135.8	62546.	57028.	461.
640.00	5.32611	1.1354	104.69	172.	200.	138.9	64535.	58903.	457.
650.00	5.21940	1.0896	103.79	173.	201.	142.0	66537.	60789.	455.
660.00	5.11612	1.0469	103.08	175.	202.	145.1	68551.	62687.	452.
670.00	5.01624	1.0071	102.54	177.	203.	148.1	70577.	64596.	450.
680.00	4.91968	.96988	102.17	178.	204.	151.2	72614.	66516.	449.
690.00	4.82636	.93507	101.94	180.	206.	154.2	74664.	68448.	447.
700.00	4.73620	.90247	101.85	182.	207.	157.1	76725.	70390.	446.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

350.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV - - J/MOL	CP /DEG K) - -	S*	H* - - J/MOL	U - -	VEL SND M/SEC
250.00	10.99671	11.640	838.16	88.	122.	-10.5	599.	-2584.	1410.
260.00	10.85783	10.876	783.01	90.	123.	-5.7	1822.	-1401.	1359.
270.00	10.71885	10.176	731.49	92.	125.	-1.0	3062.	-203.	1310.
280.00	10.57957	9.5311	683.39	94.	127.	3.6	4321.	1013.	1262.
290.00	10.43988	8.9346	638.55	96.	129.	8.1	5599.	2247.	1217.
300.00	10.29971	8.3808	596.80	98.	131.	12.5	6900.	3502.	1173.
310.00	10.15901	7.8654	557.97	100.	134.	16.8	8224.	4778.	1131.
320.00	10.01777	7.3849	521.88	103.	136.	21.1	9572.	6078.	1090.
330.00	9.87601	6.9362	488.37	105.	139.	25.3	10945.	7401.	1052.
340.00	9.73373	6.5170	457.28	108.	141.	29.5	12344.	8748.	1015.
350.00	9.59099	6.1250	428.46	110.	144.	33.6	13768.	10119.	980.
360.00	9.44784	5.7584	401.75	113.	146.	37.7	15219.	11514.	946.
370.00	9.30435	5.4154	377.03	116.	149.	41.8	16694.	12933.	914.
380.00	9.16060	5.0945	354.16	118.	151.	45.8	18195.	14374.	883.
390.00	9.01668	4.7944	333.02	121.	154.	49.7	19721.	15839.	855.
400.00	8.87269	4.5136	313.49	123.	156.	53.6	21270.	17325.	827.
410.00	8.72876	4.2511	295.47	126.	158.	57.5	22843.	18833.	801.
420.00	8.58498	4.0056	278.85	128.	161.	61.4	24439.	20362.	776.
430.00	8.44151	3.7762	263.55	130.	163.	65.2	26058.	21912.	753.
440.00	8.29847	3.5618	249.47	133.	165.	69.0	27698.	23481.	731.
450.00	8.15601	3.3615	236.53	135.	167.	72.7	29360.	25069.	710.
460.00	8.01429	3.1746	224.66	137.	169.	76.4	31043.	26676.	691.
470.00	7.87345	3.0000	213.78	139.	171.	80.0	32746.	28300.	672.
480.00	7.73367	2.8371	203.82	142.	173.	83.7	34468.	29942.	655.
490.00	7.59511	2.6851	194.72	144.	175.	87.3	36210.	31601.	639.
500.00	7.45793	2.5434	186.42	146.	177.	90.8	37970.	33277.	624.
510.00	7.32229	2.4112	178.86	148.	179.	94.3	39748.	34968.	610.
520.00	7.18836	2.2880	171.98	150.	180.	97.8	41545.	36676.	597.
530.00	7.05627	2.1731	165.75	152.	182.	101.3	43358.	38398.	585.
540.00	6.92618	2.0660	160.10	154.	184.	104.7	45188.	40135.	574.
550.00	6.79823	1.9662	155.00	156.	185.	108.1	47035.	41886.	563.
560.00	6.67252	1.8731	150.40	158.	187.	111.5	48897.	43652.	554.
570.00	6.54918	1.7863	146.27	160.	189.	114.8	50775.	45431.	545.
580.00	6.42830	1.7054	142.56	161.	190.	118.1	52669.	47224.	537.
590.00	6.30997	1.6298	139.25	163.	192.	121.3	54577.	49030.	530.
600.00	6.19424	1.5593	136.31	165.	193.	124.6	56500.	50850.	524.
610.00	6.08119	1.4935	133.69	167.	194.	127.8	58438.	52682.	518.
620.00	5.97083	1.4320	131.38	169.	196.	130.9	60389.	54527.	512.
630.00	5.86321	1.3745	129.36	170.	197.	134.1	62354.	56385.	507.
640.00	5.75832	1.3207	127.59	172.	199.	137.2	64333.	58255.	503.
650.00	5.65618	1.2703	126.05	174.	200.	140.3	66325.	60137.	499.
660.00	5.55678	1.2230	124.74	176.	201.	143.3	68330.	62032.	496.
670.00	5.46008	1.1788	123.62	177.	202.	146.4	70348.	63938.	493.
680.00	5.36606	1.1372	122.69	179.	204.	149.4	72379.	65857.	490.
690.00	5.27469	1.0981	121.92	180.	205.	152.4	74423.	67787.	488.
700.00	5.18591	1.0613	121.31	182.	206.	155.3	76478.	69729.	486.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

400.00 BAR ISOBAR

T DEG K	DENSITY MOL/DM3	DP/DT BAR/K	DP/DD BAR/(MOL/DM3)	CV - - J/MOL	CP /DEG K)	S* - -	H* - - J/MOL	U - -	VEL SND M/SEC
250.00	11.05457	12.020	890.43	88.	121.	-11.0	911.	-2707.	1453.
260.00	10.91972	11.226	833.18	90.	123.	-6.3	2131.	-1532.	1400.
270.00	10.78502	10.503	779.85	92.	124.	-1.6	3368.	-341.	1350.
280.00	10.65032	9.8394	730.22	94.	126.	3.0	4622.	866.	1302.
290.00	10.51550	9.2277	684.05	96.	128.	7.4	5895.	2091.	1256.
300.00	10.38051	8.6616	641.13	98.	131.	11.8	7190.	3337.	1212.
310.00	10.24530	8.1362	601.27	100.	133.	16.2	8508.	4604.	1170.
320.00	10.10987	7.6475	564.26	103.	135.	20.4	9850.	5893.	1130.
330.00	9.97424	7.1922	529.92	106.	138.	24.6	11216.	7206.	1092.
340.00	9.83844	6.7675	498.08	108.	140.	28.8	12608.	8542.	1055.
350.00	9.70252	6.3711	468.57	111.	143.	32.9	14025.	9902.	1020.
360.00	9.56652	6.0008	441.22	113.	145.	36.9	15467.	11285.	987.
370.00	9.43052	5.6547	415.89	116.	148.	41.0	16934.	12692.	955.
380.00	9.29461	5.3312	392.44	119.	150.	44.9	18425.	14122.	926.
390.00	9.15887	5.0288	370.75	121.	153.	48.9	19941.	15574.	897.
400.00	9.02337	4.7461	350.68	124.	155.	52.8	21480.	17047.	870.
410.00	8.88822	4.4817	332.13	126.	157.	56.6	23043.	18542.	845.
420.00	8.75353	4.2346	314.99	128.	160.	60.5	24628.	20058.	821.
430.00	8.61939	4.0035	299.17	131.	162.	64.2	26235.	21594.	798.
440.00	8.48592	3.7875	284.57	133.	164.	68.0	27864.	23150.	776.
450.00	8.35324	3.5856	271.10	135.	166.	71.7	29513.	24725.	756.
460.00	8.22144	3.3968	258.69	138.	168.	75.4	31184.	26318.	737.
470.00	8.09066	3.2204	247.26	140.	170.	79.0	32874.	27930.	719.
480.00	7.96099	3.0555	236.75	142.	172.	82.6	34583.	29559.	702.
490.00	7.83257	2.9014	227.08	144.	174.	86.2	36312.	31205.	686.
500.00	7.70550	2.7573	218.21	146.	176.	89.7	38059.	32868.	671.
510.00	7.57988	2.6227	210.07	148.	177.	93.2	39824.	34547.	657.
520.00	7.45583	2.4969	202.61	150.	179.	96.6	41607.	36242.	644.
530.00	7.33344	2.3792	195.78	152.	181.	100.1	43407.	37953.	632.
540.00	7.21281	2.2692	189.53	154.	183.	103.5	45224.	39679.	621.
550.00	7.09402	2.1663	183.83	156.	184.	106.8	47058.	41419.	611.
560.00	6.97715	2.0700	178.63	158.	186.	110.2	48908.	43175.	601.
570.00	6.86227	1.9799	173.89	160.	187.	113.5	50774.	44945.	592.
580.00	6.74945	1.8956	169.59	162.	189.	116.7	52655.	46729.	583.
590.00	6.63873	1.8166	165.68	164.	190.	120.0	54552.	48527.	576.
600.00	6.53017	1.7426	162.14	166.	192.	123.2	56464.	50339.	569.
610.00	6.42379	1.6732	158.94	167.	193.	126.4	58391.	52164.	562.
620.00	6.31964	1.6081	156.06	169.	195.	129.5	60333.	54003.	556.
630.00	6.21771	1.5470	153.47	171.	196.	132.7	62288.	55855.	551.
640.00	6.11804	1.4896	151.15	173.	198.	135.8	64258.	57720.	546.
650.00	6.02061	1.4356	149.07	174.	199.	138.8	66242.	59598.	541.
660.00	5.92544	1.3848	147.23	176.	200.	141.9	68239.	61489.	537.
670.00	5.83249	1.3370	145.60	178.	202.	144.9	70250.	63392.	533.
680.00	5.74177	1.2920	144.17	179.	203.	147.9	72274.	65308.	530.
690.00	5.65325	1.2495	142.91	181.	204.	150.9	74311.	67236.	527.
700.00	5.56691	1.2094	141.83	182.	206.	153.8	76362.	69176.	525.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

1.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		
-40.00	.0130	.23974-2	76.951	.293	.328	.389	141.35	127.06	632.
-20.00	.0124	.22868-2	80.687	.305	.339	.404	148.02	133.04	645.
.00	.0118	.21861-2	84.418	.316	.351	.420	154.92	139.25	659.
20.00	.0113	.20939-2	88.145	.328	.363	.435	162.05	145.70	672.
40.00	.0109	.20092-2	91.868	.341	.375	.450	169.43	152.39	685.
60.00	.0104	.19311-2	95.588	.353	.387	.465	177.05	159.33	698.
80.00	.0101	.18590-2	99.306	.365	.400	.480	184.92	166.51	710.
100.00	.0097	.17920-2	103.02	.378	.412	.495	193.04	173.95	722.
120.00	.0094	.17297-2	106.73	.390	.425	.509	201.41	181.63	734.
140.00	.0090	.16716-2	110.45	.403	.437	.524	210.03	189.56	746.
160.00	.0088	.16174-2	114.16	.415	.450	.538	218.89	197.75	757.
180.00	.0085	.15665-2	117.86	.428	.462	.553	228.01	206.18	768.
200.00	.0082	.15188-2	121.57	.440	.475	.567	237.38	214.86	780.
220.00	.0080	.14739-2	125.28	.453	.487	.582	247.00	223.79	791.
240.00	.0077	.14316-2	128.98	.465	.499	.596	256.86	232.97	801.
260.00	.0075	.13916-2	132.69	.477	.511	.610	266.96	242.39	812.
280.00	.0073	.13538-2	136.39	.489	.523	.624	277.31	252.05	823.
300.00	.0071	.13181-2	140.09	.501	.535	.639	287.89	261.95	833.
320.00	.0070	.12841-2	143.79	.512	.547	.653	298.71	272.08	843.
340.00	.0068	.12519-2	147.49	.524	.558	.667	309.75	282.45	854.
360.00	.0066	.12213-2	151.20	.535	.570	.681	321.03	293.04	864.
380.00	.0065	.11921-2	154.90	.546	.581	.694	332.53	303.86	874.
400.00	.0063	.11643-2	158.60	.557	.592	.708	344.26	314.90	884.
420.00	.0062	.11378-2	162.29	.568	.602	.722	356.20	326.15	893.
440.00	.0060	.11125-2	165.99	.579	.613	.736	368.35	337.62	903.
460.00	.0059	.10882-2	169.69	.589	.623	.749	380.72	349.30	913.
480.00	.0058	.10650-2	173.39	.599	.634	.763	393.29	361.19	922.
500.00	.0056	.10428-2	177.09	.609	.644	.776	406.06	373.28	931.
520.00	.0055	.10214-2	180.79	.619	.653	.790	419.03	385.57	941.
540.00	.0054	.10010-2	184.48	.629	.663	.803	432.20	398.05	950.
560.00	.0053	.98131-3	188.18	.638	.673	.816	445.56	410.73	959.
580.00	.0052	.96240-3	191.88	.648	.682	.829	459.10	423.59	968.
600.00	.0051	.94421-3	195.57	.657	.691	.842	472.83	436.64	977.
620.00	.0050	.92670-3	199.27	.666	.700	.855	486.75	449.86	986.
640.00	.0049	.90983-3	202.97	.675	.709	.868	500.84	463.27	995.
660.00	.0048	.89355-3	206.66	.683	.718	.881	515.10	476.85	1003.
680.00	.0048	.87786-3	210.36	.692	.726	.894	529.54	490.60	1012.
700.00	.0047	.86270-3	214.06	.700	.734	.907	544.14	504.52	1020.
720.00	.0046	.84806-3	217.75	.708	.743	.919	558.91	518.61	1029.
740.00	.0045	.83391-3	221.45	.716	.751	.932	573.84	532.86	1037.
760.00	.0044	.82021-3	225.14	.724	.758	.944	588.93	547.26	1046.
780.00	.0044	.80697-3	228.84	.732	.766	.957	604.18	561.83	1054.
800.00	.0043	.79415-3	232.53	.740	.774	.969	619.58	576.54	1062.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

5.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		
-40.00	38.9165	65.880	1859.7	.381	.501	-.059	-26.29	-26.31	3366.
-33.50	38.6853	64.615	1808.9	.384	.505	-.051	-23.01	-23.04	3324.
-33.50	.0646	.012112	76.005	.297	.334	.338	142.93	128.62	629.
-20.00	.0626	.011708	78.661	.305	.341	.349	147.49	132.70	639.
.00	.0597	.011160	82.568	.317	.353	.364	154.43	138.94	653.
20.00	.0571	.010664	86.448	.329	.365	.379	161.60	145.41	667.
40.00	.0548	.010212	90.305	.341	.376	.394	169.01	152.12	680.
60.00	.0526	.97985-2	94.145	.353	.389	.409	176.66	159.07	693.
80.00	.0506	.94183-2	97.968	.366	.401	.424	184.56	166.27	706.
100.00	.0488	.90675-2	101.78	.378	.413	.439	192.70	173.72	718.
120.00	.0470	.87428-2	105.58	.391	.426	.454	201.09	181.42	731.
140.00	.0454	.84411-2	109.37	.403	.438	.469	209.72	189.36	742.
160.00	.0439	.81601-2	113.15	.416	.451	.483	218.61	197.56	754.
180.00	.0425	.78976-2	116.92	.428	.463	.498	227.75	206.00	766.
200.00	.0412	.76519-2	120.69	.440	.475	.512	237.13	214.69	777.
220.00	.0400	.74213-2	124.45	.453	.488	.526	246.76	223.63	788.
240.00	.0389	.72044-2	128.20	.465	.500	.541	256.63	232.81	799.
260.00	.0378	.70001-2	131.95	.477	.512	.555	266.74	242.24	810.
280.00	.0367	.68073-2	135.70	.489	.524	.569	277.10	251.91	821.
300.00	.0358	.66249-2	139.44	.501	.535	.583	287.69	261.81	832.
320.00	.0348	.64522-2	143.18	.513	.547	.597	298.52	271.95	842.
340.00	.0339	.62884-2	146.92	.524	.559	.611	309.58	282.32	852.
360.00	.0331	.61327-2	150.65	.535	.570	.625	320.86	292.92	862.
380.00	.0323	.59847-2	154.38	.547	.581	.639	332.37	303.74	872.
400.00	.0316	.58438-2	158.11	.557	.592	.653	344.10	314.79	882.
420.00	.0308	.57094-2	161.84	.568	.603	.667	356.05	326.05	892.
440.00	.0302	.55811-2	165.56	.579	.613	.680	368.21	337.52	902.
460.00	.0295	.54584-2	169.28	.589	.624	.694	380.58	349.20	912.
480.00	.0289	.53411-2	173.00	.599	.634	.708	393.15	361.09	921.
500.00	.0283	.52288-2	176.72	.609	.644	.721	405.93	373.19	931.
520.00	.0277	.51212-2	180.44	.619	.654	.734	418.91	385.48	940.
540.00	.0271	.50179-2	184.16	.629	.663	.748	432.08	397.96	949.
560.00	.0266	.49187-2	187.88	.638	.673	.761	445.44	410.64	958.
580.00	.0261	.48234-2	191.59	.648	.682	.774	458.99	423.51	967.
600.00	.0256	.47317-2	195.30	.657	.691	.787	472.73	436.56	976.
620.00	.0251	.46434-2	199.02	.666	.700	.800	486.64	449.79	985.
640.00	.0246	.45585-2	202.73	.675	.709	.813	500.74	463.19	994.
660.00	.0242	.44765-2	206.44	.683	.718	.826	515.01	476.78	1003.
680.00	.0238	.43975-2	210.15	.692	.726	.839	529.44	490.53	1011.
700.00	.0234	.43213-2	213.86	.700	.734	.852	544.05	504.45	1020.
720.00	.0230	.42476-2	217.57	.708	.743	.864	558.82	518.54	1029.
740.00	.0226	.41765-2	221.28	.716	.751	.877	573.76	532.79	1037.
760.00	.0222	.41077-2	224.98	.724	.759	.889	588.85	547.20	1045.
780.00	.0219	.40411-2	228.69	.732	.766	.902	604.10	561.76	1054.
800.00	.0215	.39766-2	232.40	.740	.774	.914	619.50	576.48	1062.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

10.00 PSI ISOBAR

T	DENSITY	DP/DT	DP/DD	CV	CP	S*	H*	U	VEL SND
DEG F	LB/FT3	PSI/DEG F	PSI/(LB/FT3)	- -	BTU/LB/DEG F)	- -	- -	BTU/LB - -	FT/SEC
-40.00	38.9192	65.943	1862.0	.381	.501	-.059	-26.27	-26.32	3369.
-20.00	38.2015	61.979	1702.9	.388	.514	-.035	-16.12	-16.17	3234.
-6.17	37.6926	59.148	1589.8	.391	.521	-.019	-8.96	-9.01	3134.
-6.17	.1230	.023350	78.844	.314	.352	.335	151.60	136.55	641.
.00	.1212	.022980	80.125	.318	.356	.339	153.78	138.51	645.
20.00	.1157	.021871	84.234	.329	.367	.355	161.01	145.02	660.
40.00	.1108	.020878	88.285	.341	.379	.370	168.47	151.76	674.
60.00	.1062	.019981	92.290	.354	.391	.385	176.16	158.74	687.
80.00	.1021	.019164	96.259	.366	.403	.400	184.09	165.96	701.
100.00	.0983	.018417	100.20	.378	.415	.415	192.26	173.43	714.
120.00	.0947	.017731	104.11	.391	.427	.430	200.68	181.14	726.
140.00	.0914	.017096	108.00	.403	.439	.444	209.34	189.10	739.
160.00	.0884	.016509	111.87	.416	.452	.459	218.25	197.31	751.
180.00	.0855	.015962	115.73	.428	.464	.474	227.41	205.77	762.
200.00	.0829	.015452	119.57	.441	.476	.488	236.81	214.48	774.
220.00	.0804	.014975	123.40	.453	.488	.503	246.45	223.43	786.
240.00	.0780	.014527	127.22	.465	.500	.517	256.34	232.62	797.
260.00	.0758	.014107	131.03	.477	.512	.531	266.47	242.05	808.
280.00	.0737	.013711	134.83	.489	.524	.545	276.84	251.73	819.
300.00	.0717	.013337	138.62	.501	.536	.559	287.45	261.64	829.
320.00	.0698	.012984	142.41	.513	.548	.574	298.28	271.79	840.
340.00	.0681	.012649	146.19	.524	.559	.588	309.35	282.16	850.
360.00	.0664	.012331	149.97	.535	.570	.602	320.65	292.77	861.
380.00	.0648	.012030	153.74	.547	.581	.615	332.17	303.60	871.
400.00	.0632	.011743	157.50	.558	.592	.629	343.90	314.65	881.
420.00	.0618	.011470	161.26	.568	.603	.643	355.86	325.91	891.
440.00	.0604	.011209	165.02	.579	.614	.657	368.03	337.39	901.
460.00	.0591	.010961	168.77	.589	.624	.670	380.41	349.08	910.
480.00	.0578	.010723	172.52	.600	.634	.684	392.99	360.97	920.
500.00	.0566	.010495	176.27	.610	.644	.697	405.77	373.07	930.
520.00	.0554	.010277	180.01	.619	.654	.711	418.75	385.36	939.
540.00	.0543	.010068	183.76	.629	.664	.724	431.93	397.85	948.
560.00	.0532	.98677-2	187.49	.639	.673	.737	445.30	410.53	957.
580.00	.0522	.96751-2	191.23	.648	.682	.750	458.86	423.40	967.
600.00	.0512	.94899-2	194.97	.657	.692	.763	472.60	436.45	976.
620.00	.0502	.93118-2	198.70	.666	.700	.776	486.52	449.69	985.
640.00	.0493	.91403-2	202.43	.675	.709	.789	500.61	463.10	993.
660.00	.0484	.89751-2	206.16	.683	.718	.802	514.89	476.68	1002.
680.00	.0476	.88158-2	209.89	.692	.726	.815	529.33	490.44	1011.
700.00	.0468	.86621-2	213.62	.700	.735	.828	543.94	504.36	1020.
720.00	.0460	.85137-2	217.34	.708	.743	.840	558.71	518.45	1028.
740.00	.0452	.83704-2	221.06	.716	.751	.853	573.65	532.70	1037.
760.00	.0444	.82318-2	224.79	.724	.759	.865	588.75	547.11	1045.
780.00	.0437	.80977-2	228.51	.732	.766	.878	604.00	561.68	1053.
800.00	.0430	.79680-2	232.23	.740	.774	.890	619.41	576.40	1062.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

14.696 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		
-40.00	38.9217	66.002	1864.2	.381	.501	-.059	-26.26	-26.33	3371.
-20.00	38.2042	62.032	1705.0	.388	.514	-.035	-16.11	-16.18	3236.
.00	37.4649	57.918	1541.0	.393	.525	-.012	-5.72	-5.80	3090.
10.84	37.0535	55.657	1451.7	.396	.531	-.000	.00	-.07	3006.
10.84	.1760	.033796	80.069	.325	.365	.334	157.05	141.60	646.
20.00	.1722	.032985	82.053	.330	.370	.341	160.42	144.63	653.
40.00	.1646	.031372	86.315	.342	.381	.356	167.93	151.40	668.
60.00	.1576	.029936	90.497	.354	.393	.371	175.67	158.41	682.
80.00	.1513	.028646	94.616	.367	.404	.386	183.64	165.66	696.
100.00	.1455	.027477	98.684	.379	.416	.401	191.84	173.15	709.
120.00	.1401	.026411	102.71	.391	.428	.416	200.29	180.88	722.
140.00	.1352	.025432	106.70	.404	.441	.431	208.98	188.86	735.
160.00	.1306	.024529	110.67	.416	.453	.446	217.91	197.08	747.
180.00	.1263	.023693	114.60	.429	.465	.460	227.09	205.55	759.
200.00	.1223	.022917	118.52	.441	.477	.475	236.50	214.27	771.
220.00	.1186	.022193	122.42	.453	.489	.489	246.17	223.23	783.
240.00	.1151	.021515	126.30	.465	.501	.503	256.07	232.43	794.
260.00	.1117	.020880	130.16	.477	.513	.518	266.22	241.88	804.
280.00	.1086	.020284	134.02	.489	.525	.532	276.60	251.56	817.
300.00	.1057	.019722	137.86	.501	.537	.546	287.21	261.48	827.
320.00	.1029	.019191	141.69	.513	.548	.560	298.06	271.63	838.
340.00	.1003	.018689	145.51	.524	.560	.574	309.14	282.02	849.
360.00	.0978	.018214	149.32	.536	.571	.588	320.45	292.63	859.
380.00	.0954	.017763	153.13	.547	.582	.602	331.97	303.46	869.
400.00	.0931	.017335	156.93	.558	.593	.616	343.72	314.51	880.
420.00	.0910	.016927	160.72	.568	.603	.630	355.68	325.78	890.
440.00	.0889	.016539	164.51	.579	.614	.643	367.86	337.27	900.
460.00	.0869	.016168	168.29	.589	.624	.657	380.24	348.96	909.
480.00	.0851	.015814	172.07	.600	.635	.671	392.83	360.86	919.
500.00	.0833	.015476	175.84	.610	.644	.684	405.62	372.96	929.
520.00	.0815	.015152	179.61	.619	.654	.697	418.61	385.26	938.
540.00	.0799	.014841	183.38	.629	.664	.711	431.79	397.75	947.
560.00	.0783	.014544	187.14	.639	.673	.724	445.17	410.43	957.
580.00	.0768	.014258	190.89	.648	.683	.737	458.73	423.30	966.
600.00	.0753	.013983	194.65	.657	.692	.750	472.47	436.36	975.
620.00	.0739	.013719	198.40	.666	.701	.763	486.40	449.59	984.
640.00	.0725	.013465	202.15	.675	.709	.776	500.50	463.01	993.
660.00	.0712	.013220	205.90	.683	.718	.789	514.77	476.59	1002.
680.00	.0700	.012984	209.64	.692	.727	.802	529.22	490.35	1010.
700.00	.0688	.012757	213.39	.700	.735	.815	543.83	504.28	1019.
720.00	.0676	.012537	217.13	.708	.743	.827	558.61	518.37	1028.
740.00	.0664	.012325	220.86	.716	.751	.840	573.55	532.62	1036.
760.00	.0653	.012120	224.60	.724	.759	.852	588.65	547.03	1045.
780.00	.0643	.011922	228.34	.732	.767	.865	603.91	561.60	1053.
800.00	.0633	.011730	232.07	.740	.774	.877	619.32	576.32	1061.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

15.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		FT/SEC
-40.00	38.9219	66.006	1864.4	.381	.501	-.059	-26.26	-26.33	3371.
-20.00	38.2044	62.035	1705.1	.388	.514	-.035	-16.11	-16.18	3236.
.00	37.4651	57.921	1541.1	.393	.525	-.012	-5.72	-5.80	3090.
11.79	37.0174	55.462	1444.1	.396	.532	.001	.50	.43	2998.
11.79	.1794	.034473	80.123	.326	.366	.334	157.36	141.88	646.
20.00	.1759	.033727	81.908	.330	.370	.340	160.38	144.60	652.
40.00	.1681	.032068	86.185	.342	.381	.355	167.89	151.38	667.
60.00	.1610	.030595	90.379	.354	.393	.371	175.63	158.39	682.
80.00	.1545	.029272	94.508	.367	.404	.386	183.61	165.64	695.
100.00	.1486	.028074	98.585	.379	.416	.401	191.81	173.13	709.
120.00	.1431	.026981	102.62	.391	.428	.415	200.26	180.86	722.
140.00	.1380	.025979	106.62	.404	.441	.430	208.95	188.84	735.
160.00	.1333	.025055	110.59	.416	.453	.445	217.89	197.07	747.
180.00	.1290	.024199	114.53	.429	.465	.459	227.06	205.54	759.
200.00	.1249	.023405	118.45	.441	.477	.474	236.49	214.26	771.
220.00	.1210	.022664	122.35	.453	.489	.488	246.15	223.22	783.
240.00	.1175	.021972	126.24	.465	.501	.503	256.05	232.42	794.
260.00	.1141	.021322	130.11	.477	.513	.517	266.20	241.87	805.
280.00	.1109	.020712	133.96	.489	.525	.531	276.58	251.55	816.
300.00	.1079	.020138	137.81	.501	.537	.545	287.20	261.47	827.
320.00	.1050	.019595	141.64	.513	.548	.559	298.05	271.62	838.
340.00	.1024	.019083	145.47	.524	.560	.574	309.13	282.01	849.
360.00	.0998	.018597	149.28	.536	.571	.587	320.43	292.62	859.
380.00	.0974	.018136	153.09	.547	.582	.601	331.96	303.45	869.
400.00	.0951	.017698	156.89	.558	.593	.615	343.71	314.51	879.
420.00	.0929	.017282	160.69	.568	.604	.629	355.67	325.78	890.
440.00	.0908	.016885	164.48	.579	.614	.643	367.85	337.26	899.
460.00	.0887	.016507	168.26	.589	.624	.656	380.23	348.95	909.
480.00	.0868	.016145	172.04	.600	.635	.670	392.82	360.85	919.
500.00	.0850	.015799	175.81	.610	.645	.683	405.61	372.95	928.
520.00	.0832	.015468	179.58	.619	.654	.697	418.60	385.25	938.
540.00	.0815	.015151	183.35	.629	.664	.710	431.78	397.74	947.
560.00	.0799	.014847	187.11	.639	.673	.723	445.16	410.42	957.
580.00	.0784	.014555	190.87	.648	.683	.736	458.72	423.30	966.
600.00	.0769	.014275	194.63	.657	.692	.749	472.46	436.35	975.
620.00	.0754	.014005	198.38	.666	.701	.763	486.39	449.59	984.
640.00	.0740	.013746	202.13	.675	.709	.775	500.49	463.00	993.
660.00	.0727	.013496	205.88	.683	.718	.788	514.77	476.59	1002.
680.00	.0714	.013255	209.63	.692	.727	.801	529.21	490.35	1010.
700.00	.0702	.013022	213.37	.700	.735	.814	543.83	504.27	1019.
720.00	.0690	.012798	217.11	.708	.743	.826	558.61	518.36	1028.
740.00	.0678	.012582	220.85	.716	.751	.839	573.55	532.62	1036.
760.00	.0667	.012372	224.59	.724	.759	.852	588.65	547.03	1045.
780.00	.0656	.012170	228.33	.732	.767	.864	603.90	561.60	1053.
800.00	.0646	.011974	232.06	.740	.774	.876	619.31	576.32	1061.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

20.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		FT/SEC
-40.00	38.9246	66.068	1866.7	.381	.501	-.059	-26.24	-26.34	3374.
-20.00	38.2073	62.092	1707.3	.388	.514	-.035	-16.09	-16.19	3239.
.00	37.4684	57.973	1543.2	.393	.525	-.012	-5.71	-5.81	3092.
20.00	36.7030	53.790	1378.8	.399	.537	.010	4.91	4.80	2935.
25.54	36.4855	52.626	1333.6	.400	.540	.016	7.89	7.79	2890.
25.54	.2347	.045625	80.736	.335	.377	.334	161.80	146.03	649.
40.00	.2268	.043863	84.000	.343	.384	.345	167.30	150.98	661.
60.00	.2169	.041695	88.406	.355	.395	.360	175.09	158.03	676.
80.00	.2079	.039777	92.712	.367	.407	.375	183.11	165.31	690.
100.00	.1997	.038062	96.940	.379	.418	.390	191.36	172.82	704.
120.00	.1922	.036511	101.10	.392	.430	.405	199.84	180.58	717.
140.00	.1852	.035100	105.22	.404	.442	.420	208.56	188.58	731.
160.00	.1788	.033808	109.29	.416	.454	.435	217.52	196.82	743.
180.00	.1729	.032617	113.32	.429	.466	.449	226.72	205.31	756.
200.00	.1673	.031516	117.32	.441	.478	.464	236.16	214.03	768.
220.00	.1621	.030493	121.30	.453	.490	.478	245.84	223.01	780.
240.00	.1572	.029540	125.25	.466	.502	.493	255.76	232.22	791.
260.00	.1526	.028649	129.18	.478	.514	.507	265.92	241.68	803.
280.00	.1483	.027813	133.09	.490	.526	.521	276.32	251.37	814.
300.00	.1443	.027028	136.99	.501	.537	.535	286.95	261.30	825.
320.00	.1404	.026288	140.87	.513	.549	.549	297.81	271.46	836.
340.00	.1368	.025590	144.74	.524	.560	.563	308.90	281.85	847.
360.00	.1334	.024930	148.60	.536	.571	.577	320.22	292.47	857.
380.00	.1301	.024304	152.45	.547	.582	.591	331.75	303.31	868.
400.00	.1270	.023710	156.28	.558	.593	.605	343.51	314.37	878.
420.00	.1240	.023146	160.11	.568	.604	.619	355.48	325.64	888.
440.00	.1212	.022609	163.93	.579	.614	.633	367.67	337.13	898.
460.00	.1185	.022097	167.75	.589	.625	.646	380.06	348.83	908.
480.00	.1159	.021608	171.56	.600	.635	.660	392.65	360.73	918.
500.00	.1135	.021141	175.36	.610	.645	.673	405.45	372.83	927.
520.00	.1111	.020695	179.16	.620	.655	.687	418.45	385.13	937.
540.00	.1088	.020267	182.95	.629	.664	.700	431.63	397.63	946.
560.00	.1067	.019857	186.73	.639	.674	.713	445.01	410.32	956.
580.00	.1046	.019464	190.51	.648	.683	.726	458.58	423.19	965.
600.00	.1026	.019087	194.29	.657	.692	.740	472.33	436.25	974.
620.00	.1007	.018724	198.07	.666	.701	.753	486.26	449.49	983.
640.00	.0988	.018375	201.84	.675	.710	.766	500.36	462.90	992.
660.00	.0970	.018038	205.60	.683	.718	.778	514.65	476.49	1001.
680.00	.0953	.017715	209.37	.692	.727	.791	529.10	490.25	1010.
700.00	.0936	.017402	213.13	.700	.735	.804	543.71	504.18	1019.
720.00	.0920	.017101	216.88	.708	.743	.817	558.50	518.28	1027.
740.00	.0905	.016810	220.64	.716	.751	.829	573.44	532.53	1036.
760.00	.0890	.016529	224.39	.724	.759	.842	588.54	546.95	1044.
780.00	.0875	.016258	228.14	.732	.767	.854	603.80	561.52	1053.
800.00	.0861	.015995	231.89	.740	.774	.866	619.21	576.24	1061.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

30.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		
-40.00	38.9299	66.193	1871.5	.381	.501	-.059	-26.21	-26.35	3379.
-20.00	38.2132	62.204	1711.7	.387	.513	-.035	-16.07	-16.21	3243.
.00	37.4748	58.076	1547.3	.393	.525	-.012	-5.68	-5.83	3097.
20.00	36.7102	53.886	1382.8	.398	.537	.010	4.93	4.78	2939.
40.00	35.9141	49.687	1221.0	.405	.550	.032	15.79	15.64	2773.
46.54	35.6458	48.318	1169.1	.407	.555	.040	19.41	19.25	2717.
46.54	.3436	.068242	80.982	.349	.395	.334	168.58	152.43	652.
60.00	.3327	.065599	84.263	.357	.401	.345	173.94	157.25	663.
80.00	.3180	.062149	88.979	.369	.412	.360	182.06	164.61	679.
100.00	.3047	.059147	93.547	.381	.422	.375	190.40	172.18	694.
120.00	.2926	.056494	97.998	.393	.434	.390	198.96	179.99	708.
140.00	.2816	.054121	102.36	.405	.445	.405	207.74	188.03	722.
160.00	.2714	.051977	106.64	.417	.457	.420	216.76	196.31	736.
180.00	.2621	.050025	110.87	.429	.468	.435	226.01	204.83	749.
200.00	.2534	.048237	115.04	.442	.480	.449	235.50	213.58	762.
220.00	.2453	.046589	119.16	.454	.492	.464	245.22	222.58	774.
240.00	.2377	.045064	123.25	.466	.504	.478	255.17	231.82	786.
260.00	.2306	.043646	127.31	.478	.515	.493	265.37	241.29	798.
280.00	.2240	.042323	131.34	.490	.527	.507	275.79	251.01	810.
300.00	.2177	.041085	135.34	.502	.539	.521	286.45	260.95	821.
320.00	.2118	.039924	139.32	.513	.550	.535	297.34	271.13	832.
340.00	.2063	.038831	143.28	.525	.561	.549	308.45	281.53	843.
360.00	.2010	.037801	147.22	.536	.572	.563	319.78	292.16	854.
380.00	.1960	.036827	151.15	.547	.583	.577	331.34	303.01	865.
400.00	.1912	.035906	155.06	.558	.594	.591	343.12	314.08	875.
420.00	.1867	.035031	158.96	.569	.605	.605	355.10	325.37	885.
440.00	.1824	.034201	162.85	.579	.615	.619	367.30	336.87	896.
460.00	.1783	.033411	166.73	.590	.625	.632	379.71	348.57	906.
480.00	.1744	.032658	170.59	.600	.636	.646	392.32	360.48	916.
500.00	.1706	.031940	174.45	.610	.645	.659	405.13	372.59	925.
520.00	.1671	.031254	178.30	.620	.655	.673	418.14	384.90	935.
540.00	.1636	.030598	182.14	.629	.665	.686	431.34	397.41	945.
560.00	.1603	.029970	185.97	.639	.674	.699	444.73	410.10	954.
580.00	.1572	.029368	189.80	.648	.683	.712	458.30	422.98	963.
600.00	.1541	.028790	193.62	.657	.692	.726	472.06	436.05	973.
620.00	.1512	.028236	197.43	.666	.701	.739	486.00	449.29	982.
640.00	.1484	.027703	201.24	.675	.710	.752	500.12	462.71	991.
660.00	.1457	.027190	205.05	.684	.719	.764	514.40	476.31	1000.
680.00	.1431	.026697	208.84	.692	.727	.777	528.86	490.07	1009.
700.00	.1406	.026221	212.64	.700	.735	.790	543.49	504.00	1018.
720.00	.1382	.025763	216.43	.708	.744	.803	558.28	518.10	1026.
740.00	.1358	.025320	220.22	.717	.752	.815	573.23	532.36	1035.
760.00	.1336	.024893	224.00	.724	.759	.828	588.34	546.78	1044.
780.00	.1314	.024480	227.78	.732	.767	.840	603.61	561.35	1052.
800.00	.1293	.024081	231.56	.740	.775	.852	619.02	576.08	1060.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

40.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		
-40.00	38.9353	66.318	1876.2	.381	.501	-.059	-26.18	-26.37	3383.
-20.00	38.2190	62.315	1716.1	.387	.513	-.036	-16.04	-16.23	3248.
.00	37.4813	58.179	1551.5	.393	.525	-.012	-5.66	-5.85	3101.
20.00	36.7175	53.983	1386.8	.398	.537	.010	4.95	4.75	2944.
40.00	35.9223	49.780	1224.9	.405	.550	.032	15.82	15.61	2778.
60.00	35.0895	45.604	1067.9	.413	.565	.054	26.96	26.75	2603.
62.71	34.9732	45.041	1047.0	.414	.567	.057	28.50	28.28	2579.
62.71	.4515	.091447	80.549	.361	.410	.335	173.80	157.40	652.
80.00	.4329	.086658	85.038	.371	.418	.349	180.95	163.85	667.
100.00	.4137	.081929	90.004	.382	.427	.364	189.39	171.50	683.
120.00	.3964	.077853	94.784	.394	.438	.379	198.04	179.37	699.
140.00	.3807	.074280	99.419	.406	.448	.394	206.90	187.46	714.
160.00	.3664	.071104	103.94	.418	.460	.409	215.98	195.78	728.
180.00	.3533	.068249	108.37	.430	.471	.424	225.28	204.33	742.
200.00	.3412	.065660	112.72	.442	.482	.439	234.82	213.12	755.
220.00	.3300	.063296	117.01	.454	.494	.453	244.58	222.15	768.
240.00	.3195	.061124	121.24	.466	.506	.468	254.58	231.41	781.
260.00	.3098	.059117	125.43	.478	.517	.482	264.80	240.91	793.
280.00	.3006	.057255	129.57	.490	.529	.496	275.26	250.64	805.
300.00	.2921	.055520	133.68	.502	.540	.511	285.94	260.60	817.
320.00	.2840	.053899	137.77	.513	.551	.525	296.86	270.79	828.
340.00	.2764	.052379	141.82	.525	.562	.539	307.99	281.21	839.
360.00	.2692	.050950	145.85	.536	.573	.553	319.35	291.85	851.
380.00	.2624	.049604	149.85	.547	.584	.567	330.93	302.72	861.
400.00	.2560	.048333	153.84	.558	.595	.581	342.72	313.80	872.
420.00	.2498	.047129	157.81	.569	.606	.595	354.72	325.10	883.
440.00	.2440	.045988	161.76	.579	.616	.608	366.94	336.60	893.
460.00	.2385	.044905	165.70	.590	.626	.622	379.36	348.32	903.
480.00	.2332	.043874	169.63	.600	.636	.636	391.98	360.24	913.
500.00	.2281	.042892	173.54	.610	.646	.649	404.81	372.36	923.
520.00	.2233	.041956	177.44	.620	.656	.663	417.83	384.67	933.
540.00	.2186	.041061	181.33	.629	.665	.676	431.04	397.18	943.
560.00	.2142	.040206	185.21	.639	.675	.689	444.44	409.88	952.
580.00	.2100	.039387	189.08	.648	.684	.702	458.03	422.77	962.
600.00	.2059	.038602	192.94	.657	.693	.716	471.79	435.84	971.
620.00	.2020	.037849	196.80	.666	.702	.729	485.74	449.09	981.
640.00	.1982	.037126	200.65	.675	.711	.742	499.87	462.52	990.
660.00	.1946	.036431	204.49	.684	.719	.754	514.16	476.12	999.
680.00	.1911	.035762	208.32	.692	.728	.767	528.63	489.89	1008.
700.00	.1877	.035118	212.15	.700	.736	.780	543.26	503.82	1017.
720.00	.1844	.034498	215.98	.709	.744	.793	558.06	517.93	1026.
740.00	.1813	.033900	219.79	.717	.752	.805	573.02	532.19	1034.
760.00	.1783	.033323	223.61	.724	.760	.818	588.14	546.61	1043.
780.00	.1753	.032765	227.42	.732	.767	.830	603.41	561.19	1051.
800.00	.1725	.032227	231.22	.740	.775	.842	618.83	575.92	1060.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

50.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		
-40.00	38.9406	66.442	1880.8	.380	.501	-.059	-26.15	-26.39	3388.
-20.00	38.2248	62.427	1720.5	.387	.513	-.036	-16.01	-16.25	3253.
.00	37.4877	58.281	1555.6	.392	.525	-.013	-5.63	-5.88	3106.
20.00	36.7247	54.079	1390.7	.398	.536	.010	4.98	4.73	2948.
40.00	35.9305	49.872	1228.8	.405	.550	.032	15.84	15.58	2782.
60.00	35.0989	45.694	1071.7	.413	.565	.054	26.98	26.72	2608.
76.06	34.3988	42.375	949.87	.420	.578	.072	36.15	35.89	2463.
76.06	.5591	.11534	79.749	.371	.424	.336	178.08	161.53	650.
80.00	.5535	.11378	80.862	.373	.425	.340	179.75	163.03	654.
100.00	.5271	.10671	86.297	.384	.433	.355	188.33	170.77	672.
120.00	.5038	.10079	91.451	.395	.442	.371	197.08	178.71	689.
140.00	.4829	.095719	96.394	.407	.452	.386	206.02	186.86	705.
160.00	.4639	.091287	101.17	.419	.463	.401	215.17	195.23	720.
180.00	.4467	.087359	105.82	.431	.474	.416	224.54	203.83	735.
200.00	.4308	.083839	110.37	.443	.485	.430	234.13	212.65	749.
220.00	.4162	.080654	114.82	.455	.496	.445	243.93	221.70	762.
240.00	.4027	.077750	119.21	.467	.507	.460	253.97	230.99	775.
260.00	.3901	.075085	123.53	.479	.519	.474	264.23	240.51	788.
280.00	.3783	.072626	127.80	.491	.530	.488	274.72	250.26	800.
300.00	.3673	.070346	132.02	.502	.541	.503	285.43	260.24	812.
320.00	.3570	.068225	136.20	.514	.552	.517	296.37	270.45	824.
340.00	.3473	.066242	140.35	.525	.564	.531	307.53	280.89	836.
360.00	.3381	.064385	144.47	.536	.574	.545	318.91	291.54	847.
380.00	.3294	.062640	148.56	.547	.585	.559	330.51	302.42	858.
400.00	.3212	.060995	152.62	.558	.596	.573	342.32	313.51	869.
420.00	.3134	.059443	156.66	.569	.606	.587	354.34	324.82	880.
440.00	.3060	.057974	160.68	.580	.617	.600	366.57	336.34	891.
460.00	.2990	.056581	164.68	.590	.627	.614	379.01	348.06	901.
480.00	.2923	.055258	168.66	.600	.637	.628	391.65	359.99	911.
500.00	.2859	.054000	172.63	.610	.647	.641	404.48	372.12	921.
520.00	.2798	.052802	176.58	.620	.656	.655	417.52	384.44	931.
540.00	.2739	.051659	180.52	.629	.666	.668	430.74	396.96	941.
560.00	.2683	.050567	184.45	.639	.675	.681	444.15	409.67	951.
580.00	.2629	.049522	188.37	.648	.684	.695	457.75	422.56	960.
600.00	.2578	.048522	192.27	.657	.693	.708	471.53	435.64	970.
620.00	.2528	.047564	196.17	.666	.702	.721	485.48	448.89	979.
640.00	.2481	.046644	200.06	.675	.711	.734	499.62	462.32	989.
660.00	.2435	.045761	203.93	.684	.720	.747	513.92	475.93	998.
680.00	.2391	.044912	207.80	.692	.728	.759	528.40	489.70	1007.
700.00	.2349	.044095	211.67	.700	.736	.772	543.04	503.64	1016.
720.00	.2308	.043308	215.52	.709	.744	.785	557.84	517.75	1025.
740.00	.2268	.042550	219.37	.717	.752	.797	572.81	532.02	1033.
760.00	.2230	.041819	223.22	.725	.760	.810	587.93	546.44	1042.
780.00	.2193	.041113	227.05	.732	.768	.822	603.21	561.02	1051.
800.00	.2158	.040432	230.89	.740	.775	.835	618.64	575.76	1059.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) -S(N,B,T,LIQUID)

60.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		
-40.00	38.9459	66.566	1885.5	.380	.501	-.059	-26.12	-26.41	3393.
-20.00	38.2307	62.538	1724.8	.387	.513	-.036	-15.98	-16.27	3257.
.00	37.4942	58.383	1559.8	.392	.525	-.013	-5.60	-5.90	3110.
20.00	36.7318	54.175	1394.7	.398	.536	.010	5.00	4.70	2953.
40.00	35.9386	49.963	1232.6	.405	.550	.032	15.86	15.55	2787.
60.00	35.1082	45.784	1075.5	.413	.565	.054	27.00	26.68	2613.
80.00	34.2327	41.655	924.36	.422	.582	.076	38.46	38.13	2432.
87.52	33.8897	40.117	869.20	.425	.589	.084	42.86	42.53	2362.
87.52	.6669	.13998	78.724	.379	.436	.338	181.73	165.08	648.
100.00	.6457	.13387	82.404	.386	.440	.347	187.19	170.00	660.
120.00	.6152	.12556	87.988	.397	.448	.363	196.07	178.02	678.
140.00	.5883	.11860	93.276	.408	.457	.378	205.11	186.24	696.
160.00	.5642	.11264	98.339	.420	.466	.394	214.34	194.66	712.
180.00	.5423	.10743	103.23	.432	.477	.408	223.77	203.30	727.
200.00	.5224	.10283	107.98	.444	.487	.423	233.42	212.16	742.
220.00	.5042	.098702	112.61	.456	.498	.438	243.27	221.25	756.
240.00	.4873	.094972	117.15	.467	.509	.453	253.35	230.57	770.
260.00	.4717	.091572	121.61	.479	.521	.467	263.65	240.11	783.
280.00	.4571	.088453	126.01	.491	.532	.482	274.17	249.88	796.
300.00	.4436	.085577	130.35	.503	.543	.496	284.92	259.88	808.
320.00	.4309	.082910	134.63	.514	.554	.510	295.88	270.11	820.
340.00	.4189	.080429	138.88	.525	.565	.524	307.07	280.56	832.
360.00	.4077	.078111	143.08	.537	.576	.538	318.47	291.23	844.
380.00	.3971	.075939	147.25	.548	.586	.552	330.09	302.12	855.
400.00	.3870	.073898	151.39	.558	.597	.566	341.92	313.23	866.
420.00	.3775	.071975	155.50	.569	.607	.580	353.96	324.55	877.
440.00	.3685	.070159	159.59	.580	.618	.594	366.20	336.07	888.
460.00	.3599	.068441	163.65	.590	.628	.608	378.66	347.81	899.
480.00	.3517	.066812	167.70	.600	.638	.621	391.31	359.74	909.
500.00	.3440	.065265	171.72	.610	.647	.635	404.16	371.88	919.
520.00	.3365	.063793	175.73	.620	.657	.648	417.20	384.21	929.
540.00	.3294	.062391	179.72	.630	.666	.662	430.44	396.74	939.
560.00	.3226	.061052	183.69	.639	.676	.675	443.86	409.45	949.
580.00	.3161	.059774	187.65	.648	.685	.688	457.47	422.35	959.
600.00	.3099	.058551	191.60	.657	.694	.701	471.26	435.43	969.
620.00	.3039	.057380	195.54	.666	.703	.714	485.23	448.69	978.
640.00	.2982	.056258	199.46	.675	.711	.727	499.37	462.13	987.
660.00	.2926	.055180	203.38	.684	.720	.740	513.68	475.74	997.
680.00	.2873	.054145	207.29	.692	.728	.753	528.16	489.52	1006.
700.00	.2822	.053150	211.18	.700	.737	.766	542.81	503.46	1015.
720.00	.2772	.052193	215.07	.709	.745	.778	557.63	517.57	1024.
740.00	.2725	.051270	218.95	.717	.753	.791	572.60	531.85	1033.
760.00	.2679	.050381	222.83	.725	.760	.804	587.73	546.28	1041.
780.00	.2634	.049524	226.69	.732	.768	.816	603.01	560.86	1050.
800.00	.2591	.048696	230.55	.740	.776	.828	618.45	575.60	1059.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) -S(N.B.T,LIQUID)

80.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		
-40.00	38.9565	66.813	1894.9	.380	.500	-.059	-26.07	-26.45	3402.
-20.00	38.2422	62.759	1733.6	.387	.513	-.036	-15.92	-16.31	3266.
.00	37.5069	58.586	1568.0	.392	.524	-.013	-5.55	-5.94	3119.
20.00	36.7461	54.365	1402.7	.398	.536	.010	5.05	4.65	2962.
40.00	35.9548	50.146	1240.4	.404	.549	.032	15.91	15.49	2796.
60.00	35.1267	45.962	1083.0	.412	.564	.054	27.04	26.62	2622.
80.00	34.2543	41.833	931.85	.421	.581	.076	38.49	38.06	2442.
100.00	33.3270	37.766	787.41	.432	.600	.097	50.30	49.86	2254.
106.71	33.0010	36.415	740.48	.435	.608	.104	54.36	53.91	2190.
106.71	.8841	.19164	76.268	.395	.459	.340	187.77	171.02	642.
120.00	.8525	.18178	80.617	.401	.462	.350	193.88	176.51	656.
140.00	.8105	.16947	86.728	.411	.467	.366	203.17	184.90	676.
160.00	.7738	.15937	92.448	.422	.475	.382	212.59	193.46	694.
180.00	.7413	.15084	97.875	.434	.484	.397	222.18	202.20	712.
200.00	.7120	.14349	103.08	.445	.493	.412	231.95	211.15	728.
220.00	.6854	.13705	108.10	.457	.503	.427	241.91	220.31	743.
240.00	.6611	.13134	112.98	.469	.514	.442	252.09	229.69	758.
260.00	.6388	.12620	117.74	.480	.524	.456	262.47	239.29	772.
280.00	.6182	.12155	122.40	.492	.535	.471	273.06	249.11	786.
300.00	.5990	.11731	126.97	.503	.546	.485	283.87	259.15	799.
320.00	.5812	.11341	131.48	.515	.556	.499	294.89	269.42	812.
340.00	.5645	.10981	135.92	.526	.567	.514	306.13	279.90	824.
360.00	.5488	.10646	140.30	.537	.578	.528	317.58	290.60	837.
380.00	.5341	.10335	144.64	.548	.588	.542	329.24	301.52	849.
400.00	.5202	.10044	148.94	.559	.599	.556	341.11	312.65	860.
420.00	.5071	.097711	153.19	.570	.609	.570	353.18	323.99	872.
440.00	.4947	.095144	157.41	.580	.619	.584	365.47	335.54	883.
460.00	.4829	.092724	161.60	.590	.629	.597	377.95	347.29	894.
480.00	.4717	.090437	165.77	.600	.639	.611	390.63	359.25	905.
500.00	.4611	.088271	169.90	.610	.649	.624	403.51	371.40	915.
520.00	.4509	.086216	174.01	.620	.658	.638	416.58	383.75	926.
540.00	.4412	.084263	178.10	.630	.668	.651	429.84	396.28	936.
560.00	.4320	.082404	182.17	.639	.677	.665	443.28	409.01	946.
580.00	.4231	.080631	186.23	.648	.686	.678	456.91	421.92	956.
600.00	.4146	.078939	190.26	.658	.695	.691	470.72	435.02	966.
620.00	.4065	.077321	194.28	.666	.704	.704	484.71	448.29	975.
640.00	.3987	.075773	198.28	.675	.712	.717	498.87	461.74	985.
660.00	.3912	.074289	202.27	.684	.721	.730	513.20	475.36	994.
680.00	.3840	.072866	206.25	.692	.729	.743	527.70	489.15	1004.
700.00	.3771	.071500	210.22	.701	.737	.756	542.36	503.10	1013.
720.00	.3704	.070186	214.17	.709	.745	.768	557.19	517.22	1022.
740.00	.3640	.068923	218.12	.717	.753	.781	572.18	531.50	1031.
760.00	.3578	.067706	222.05	.725	.761	.793	587.32	545.94	1040.
780.00	.3518	.066534	225.97	.732	.769	.806	602.62	560.53	1049.
800.00	.3460	.065404	229.89	.740	.776	.818	618.07	575.28	1058.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) -S(N.B.T,LIQUID)

100.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		
-40.00	38.9670	67.058	1904.2	.380	.500	-.059	-26.01	-26.48	3412.
-20.00	38.2537	62.979	1742.3	.386	.513	-.036	-15.87	-16.35	3275.
.00	37.5197	58.788	1576.3	.392	.524	-.013	-5.50	-5.99	3128.
20.00	36.7604	54.555	1410.6	.397	.536	.010	5.10	4.60	2971.
40.00	35.9708	50.328	1248.0	.404	.549	.032	15.95	15.44	2805.
60.00	35.1451	46.140	1090.6	.412	.564	.054	27.08	26.55	2631.
80.00	34.2757	42.010	939.32	.421	.581	.075	38.52	37.98	2451.
100.00	33.3522	37.945	794.88	.431	.600	.097	50.32	49.77	2265.
120.00	32.3603	33.943	657.41	.442	.622	.118	62.54	61.97	2070.
122.60	32.2252	33.425	640.03	.444	.625	.121	64.16	63.59	2044.
122.60	1.1048	.24665	73.498	.407	.481	.342	192.67	175.92	634.
140.00	1.0509	.22884	79.693	.415	.481	.356	201.03	183.42	654.
160.00	.9977	.21254	86.219	.425	.486	.372	210.70	192.15	676.
180.00	.9516	.19930	92.284	.436	.492	.387	220.47	201.03	695.
200.00	.9109	.18823	98.004	.447	.500	.403	230.40	210.08	713.
220.00	.8745	.17876	103.46	.458	.509	.418	240.49	219.33	730.
240.00	.8416	.17051	108.71	.470	.519	.433	250.77	228.78	746.
260.00	.8116	.16322	113.79	.481	.529	.447	261.25	238.44	761.
280.00	.7841	.15671	118.73	.493	.539	.462	271.92	248.32	776.
300.00	.7587	.15083	123.56	.504	.549	.477	282.80	258.40	790.
320.00	.7352	.14548	128.29	.515	.559	.491	293.88	268.71	804.
340.00	.7133	.14058	132.94	.527	.570	.505	305.17	279.23	817.
360.00	.6928	.13607	137.51	.538	.580	.519	316.67	289.96	830.
380.00	.6736	.13188	142.02	.549	.590	.534	328.38	300.90	842.
400.00	.6556	.12800	146.47	.559	.601	.548	340.29	312.06	854.
420.00	.6386	.12437	150.88	.570	.611	.561	352.40	323.43	866.
440.00	.6226	.12097	155.24	.580	.621	.575	364.72	335.00	878.
460.00	.6074	.11777	159.55	.591	.631	.589	377.23	346.77	889.
480.00	.5931	.11476	163.84	.601	.640	.603	389.95	358.74	900.
500.00	.5794	.11192	168.09	.611	.650	.616	402.85	370.91	911.
520.00	.5664	.10924	172.31	.620	.660	.630	415.95	383.28	922.
540.00	.5540	.10669	176.50	.630	.669	.643	429.23	395.83	932.
560.00	.5422	.10427	180.66	.639	.678	.657	442.70	408.57	943.
580.00	.5309	.10196	184.81	.649	.687	.670	456.35	421.50	953.
600.00	.5201	.099771	188.93	.658	.696	.683	470.18	434.60	963.
620.00	.5098	.097677	193.03	.667	.705	.696	484.19	447.89	973.
640.00	.4999	.095676	197.11	.675	.713	.709	498.37	461.35	983.
660.00	.4904	.093761	201.17	.684	.722	.722	512.72	474.98	992.
680.00	.4812	.091928	205.22	.692	.730	.735	527.23	488.78	1002.
700.00	.4724	.090169	209.26	.701	.738	.748	541.91	502.74	1011.
720.00	.4640	.088481	213.28	.709	.746	.760	556.75	516.87	1020.
740.00	.4558	.086859	217.28	.717	.754	.773	571.75	531.16	1030.
760.00	.4480	.085299	221.28	.725	.762	.786	586.91	545.60	1039.
780.00	.4404	.083797	225.26	.732	.769	.798	602.22	560.20	1048.
800.00	.4331	.082350	229.23	.740	.777	.810	617.68	574.96	1056.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) -S(N.B.T,LIQUID)

120.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		
-40.00	38.9775	67.302	1913.5	.379	.500	-.060	-25.95	-26.52	3421.
-20.00	38.2652	63.198	1750.9	.386	.513	-.036	-15.81	-16.39	3284.
.00	37.5323	58.989	1584.5	.391	.524	-.013	-5.44	-6.03	3137.
20.00	36.7745	54.743	1418.5	.397	.536	.010	5.15	4.55	2979.
40.00	35.9868	50.508	1255.7	.404	.549	.032	16.00	15.38	2814.
60.00	35.1634	46.316	1098.1	.412	.564	.054	27.12	26.49	2641.
80.00	34.2969	42.185	946.76	.421	.580	.075	38.55	37.91	2461.
100.00	33.3773	38.123	802.32	.431	.599	.097	50.35	49.68	2275.
120.00	32.3906	34.127	664.93	.442	.621	.118	62.55	61.86	2082.
136.29	31.5230	30.909	558.14	.452	.642	.136	72.83	72.12	1918.
136.29	1.3303	.30519	70.549	.419	.501	.344	196.79	180.10	626.
140.00	1.3145	.29955	72.050	.420	.500	.347	198.65	181.75	631.
160.00	1.2390	.27386	79.589	.429	.500	.363	208.64	190.71	655.
180.00	1.1755	.25388	86.416	.439	.503	.379	218.66	199.76	678.
200.00	1.1206	.23774	92.738	.449	.509	.395	228.77	208.95	698.
220.00	1.0724	.22429	98.684	.460	.516	.410	239.01	218.30	716.
240.00	1.0293	.21283	104.34	.471	.524	.425	249.41	227.84	734.
260.00	.9905	.20288	109.77	.482	.533	.440	259.98	237.57	750.
280.00	.9552	.19411	115.02	.494	.543	.455	270.75	247.50	766.
300.00	.9228	.18628	120.11	.505	.553	.469	281.70	257.64	781.
320.00	.8930	.17924	125.08	.516	.563	.484	292.85	267.98	795.
340.00	.8654	.17283	129.94	.527	.573	.498	304.20	278.54	809.
360.00	.8397	.16698	134.70	.538	.583	.512	315.75	289.31	822.
380.00	.8158	.16159	139.39	.549	.593	.527	327.51	300.28	835.
400.00	.7933	.15660	144.00	.560	.603	.541	339.46	311.47	848.
420.00	.7722	.15197	148.56	.570	.613	.555	351.61	322.86	860.
440.00	.7524	.14765	153.06	.581	.623	.568	363.97	334.45	872.
460.00	.7336	.14360	157.51	.591	.632	.582	376.52	346.25	884.
480.00	.7159	.13981	161.91	.601	.642	.596	389.26	358.24	896.
500.00	.6990	.13623	166.27	.611	.651	.610	402.19	370.43	907.
520.00	.6831	.13286	170.60	.621	.661	.623	415.32	382.81	918.
540.00	.6679	.12967	174.89	.630	.670	.637	428.63	395.38	929.
560.00	.6534	.12665	179.16	.640	.679	.650	442.12	408.13	939.
580.00	.6396	.12378	183.39	.649	.688	.663	455.79	421.07	950.
600.00	.6264	.12105	187.60	.658	.697	.676	469.64	434.19	960.
620.00	.6137	.11845	191.78	.667	.706	.690	483.67	447.48	970.
640.00	.6017	.11597	195.94	.676	.714	.703	497.86	460.95	980.
660.00	.5901	.11360	200.08	.684	.722	.716	512.23	474.60	990.
680.00	.5789	.11133	204.20	.693	.731	.728	526.76	488.41	1000.
700.00	.5682	.10916	208.30	.701	.739	.741	541.46	502.38	1009.
720.00	.5580	.10708	212.39	.709	.747	.754	556.32	516.52	1019.
740.00	.5481	.10508	216.46	.717	.755	.766	571.33	530.81	1028.
760.00	.5385	.10316	220.51	.725	.762	.779	586.50	545.27	1037.
780.00	.5293	.10131	224.55	.733	.770	.791	601.83	559.88	1046.
800.00	.5205	.099536	228.58	.740	.777	.804	617.30	574.64	1055.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) -S(N,B,T,LIQUID)

140.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		
-40.00	38.9879	67.545	1922.7	.379	.500	-.060	-25.89	-26.55	3431.
-20.00	38.2766	63.416	1759.6	.386	.513	-.036	-15.75	-16.43	3293.
.00	37.5449	59.189	1592.7	.391	.524	-.013	-5.39	-6.08	3145.
20.00	36.7886	54.931	1426.3	.397	.536	.010	5.20	4.50	2988.
40.00	36.0027	50.668	1263.3	.403	.549	.032	16.04	15.32	2822.
60.00	35.1816	46.491	1105.6	.411	.563	.054	27.16	26.42	2650.
80.00	34.3179	42.359	954.17	.420	.580	.075	38.59	37.83	2471.
100.00	33.4021	38.300	809.72	.431	.599	.097	50.37	49.59	2285.
120.00	32.4205	34.310	672.41	.442	.620	.118	62.56	61.76	2093.
140.00	31.3527	30.372	542.07	.454	.646	.139	75.21	74.38	1892.
148.38	30.8721	28.729	489.41	.459	.658	.148	80.67	79.84	1804.
148.38	1.5613	.36745	67.489	.429	.522	.345	200.34	183.75	617.
160.00	1.5021	.34571	72.465	.434	.517	.355	206.37	189.13	633.
180.00	1.4155	.31602	80.225	.442	.516	.371	216.70	198.39	659.
200.00	1.3429	.29293	87.251	.452	.518	.387	227.03	207.74	681.
220.00	1.2803	.27426	93.753	.462	.524	.403	237.45	217.21	702.
240.00	1.2252	.25871	99.864	.473	.531	.418	247.99	226.85	721.
260.00	1.1762	.24545	105.67	.484	.539	.433	258.68	236.65	739.
280.00	1.1320	.23395	111.24	.495	.547	.448	269.54	246.65	755.
300.00	1.0918	.22382	116.62	.506	.556	.463	280.57	256.85	771.
320.00	1.0550	.21478	121.83	.517	.566	.477	291.80	267.24	787.
340.00	1.0212	.20665	126.91	.528	.576	.492	303.21	277.84	801.
360.00	.9898	.19926	131.88	.539	.585	.506	314.82	288.64	815.
380.00	.9606	.19251	136.75	.549	.595	.521	326.62	299.65	829.
400.00	.9334	.18630	141.53	.560	.605	.535	338.62	310.87	842.
420.00	.9079	.18055	146.24	.571	.615	.549	350.82	322.28	855.
440.00	.8840	.17522	150.88	.581	.624	.563	363.21	333.90	867.
460.00	.8614	.17024	155.46	.591	.634	.576	375.79	345.72	879.
480.00	.8401	.16559	159.99	.601	.643	.590	388.57	357.73	891.
500.00	.8200	.16122	164.47	.611	.653	.604	401.53	369.93	903.
520.00	.8009	.15711	168.90	.621	.662	.617	414.68	382.33	914.
540.00	.7827	.15323	173.30	.630	.671	.631	428.02	394.92	925.
560.00	.7655	.14956	177.65	.640	.680	.644	441.53	407.69	936.
580.00	.7490	.14608	181.98	.649	.689	.658	455.23	420.64	947.
600.00	.7334	.14278	186.27	.658	.698	.671	469.10	433.77	957.
620.00	.7184	.13965	190.54	.667	.707	.684	483.14	447.08	968.
640.00	.7040	.13666	194.78	.676	.715	.697	497.36	460.56	978.
660.00	.6903	.13381	198.99	.684	.723	.710	511.74	474.21	988.
680.00	.6771	.13108	203.18	.693	.732	.723	526.29	488.03	998.
700.00	.6645	.12848	207.36	.701	.740	.736	541.01	502.02	1007.
720.00	.6523	.12598	211.51	.709	.748	.748	555.88	516.16	1017.
740.00	.6406	.12359	215.64	.717	.755	.761	570.91	530.47	1026.
760.00	.6294	.12129	219.75	.725	.763	.773	586.09	544.93	1036.
780.00	.6186	.11908	223.85	.733	.771	.786	601.43	559.55	1045.
800.00	.6081	.11696	227.93	.740	.778	.798	616.92	574.31	1054.

H* = H(T) - H(N.B.T.LIQUID) AND
S* = S(T) -S(N.B.T.LIQUID)

160.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		FT/SEC
-40.00	38.9983	67.786	1932.0	.379	.500	-.060	-25.83	-26.59	3440.
-20.00	38.2879	63.632	1768.2	.385	.513	-.036	-15.70	-16.47	3302.
.00	37.5574	59.388	1600.9	.391	.524	-.013	-5.33	-6.12	3154.
20.00	36.8026	55.117	1434.2	.397	.535	.010	5.25	4.45	2997.
40.00	36.0185	50.866	1270.9	.403	.548	.032	16.09	15.27	2831.
60.00	35.1996	46.665	1113.0	.411	.563	.053	27.20	26.36	2659.
80.00	34.3398	42.531	961.55	.420	.580	.075	38.62	37.76	2480.
100.00	33.4267	38.474	817.10	.430	.598	.096	50.39	49.51	2295.
120.00	32.4501	34.490	679.85	.441	.620	.118	62.57	61.65	2104.
140.00	31.3893	30.564	549.67	.453	.645	.139	75.20	74.26	1904.
159.26	30.2587	26.807	430.61	.466	.674	.160	87.89	86.91	1701.
159.26	1.7987	.43366	64.354	.439	.542	.347	203.44	186.98	607.
160.00	1.7937	.43172	64.712	.439	.542	.347	203.84	187.34	609.
180.00	1.6755	.38766	73.644	.446	.532	.364	214.56	196.89	638.
200.00	1.5799	.35495	81.510	.455	.530	.381	225.18	206.44	664.
220.00	1.4996	.32938	88.649	.464	.533	.397	235.81	216.06	687.
240.00	1.4302	.30861	95.266	.475	.538	.412	246.51	225.81	708.
260.00	1.3693	.29128	101.49	.485	.544	.427	257.33	235.71	727.
280.00	1.3149	.27647	107.41	.496	.552	.442	268.30	245.78	745.
300.00	1.2660	.26359	113.08	.507	.561	.457	279.42	256.04	762.
320.00	1.2214	.25224	118.56	.518	.569	.472	290.72	266.48	778.
340.00	1.1807	.24212	123.87	.528	.579	.486	302.21	277.13	793.
360.00	1.1431	.23299	129.05	.539	.588	.501	313.87	287.97	808.
380.00	1.1083	.22470	134.10	.550	.598	.515	325.73	299.01	822.
400.00	1.0760	.21712	139.05	.561	.607	.529	337.78	310.26	836.
420.00	1.0458	.21015	143.92	.571	.617	.543	350.01	321.70	849.
440.00	1.0175	.20370	148.70	.581	.626	.557	362.44	333.34	862.
460.00	.9909	.19771	153.41	.592	.636	.571	375.06	345.18	874.
480.00	.9659	.19212	158.07	.602	.645	.585	387.87	357.22	887.
500.00	.9423	.18689	162.66	.611	.654	.599	400.86	369.44	899.
520.00	.9199	.18198	167.21	.621	.664	.612	414.04	381.86	910.
540.00	.8987	.17736	171.70	.631	.673	.626	427.40	394.46	922.
560.00	.8785	.17300	176.16	.640	.681	.639	440.94	407.24	933.
580.00	.8594	.16888	180.58	.649	.690	.653	454.66	420.21	944.
600.00	.8411	.16498	184.96	.658	.699	.666	468.56	433.35	954.
620.00	.8237	.16127	189.30	.667	.708	.679	482.62	446.67	965.
640.00	.8070	.15774	193.62	.676	.716	.692	496.86	460.17	975.
660.00	.7911	.15438	197.91	.684	.724	.705	511.26	473.83	986.
680.00	.7758	.15118	202.18	.693	.732	.718	525.82	487.66	996.
700.00	.7611	.14812	206.41	.701	.740	.731	540.55	501.65	1006.
720.00	.7471	.14519	210.63	.709	.748	.743	555.44	515.81	1015.
740.00	.7336	.14238	214.82	.717	.756	.756	570.49	530.12	1025.
760.00	.7206	.13969	219.00	.725	.764	.769	585.68	544.59	1034.
780.00	.7080	.13711	223.15	.733	.771	.781	601.03	559.22	1044.
800.00	.6960	.13463	227.29	.740	.779	.794	616.53	573.99	1053.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) -S(N,B,T,LIQUID)

180.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		
-40.00	39.0086	68.026	1941.2	.378	.500	-.060	-25.77	-26.62	3449.
-20.00	38.2992	63.848	1776.8	.385	.512	-.036	-15.64	-16.51	3311.
.00	37.5699	59.585	1609.0	.391	.524	-.013	-5.28	-6.17	3163.
20.00	36.8165	55.303	1442.0	.396	.535	.009	5.30	4.40	3005.
40.00	36.0342	51.043	1278.5	.403	.548	.032	16.13	15.21	2840.
60.00	35.2175	46.837	1120.5	.411	.563	.053	27.24	26.29	2668.
80.00	34.3595	42.703	968.91	.420	.579	.075	38.65	37.68	2489.
100.00	33.4510	38.648	824.44	.430	.598	.096	50.42	49.42	2305.
120.00	32.4793	34.669	687.25	.441	.619	.118	62.58	61.55	2115.
140.00	31.4254	30.753	557.22	.453	.644	.139	75.20	74.14	1916.
160.00	30.2587	26.867	433.92	.466	.674	.161	88.36	87.26	1707.
169.19	29.6715	25.077	379.34	.472	.691	.171	94.63	93.51	1605.
169.19	2.0434	.50403	61.172	.448	.564	.348	206.18	189.88	598.
180.00	1.9609	.47159	66.580	.451	.554	.358	212.22	195.23	616.
200.00	1.8348	.42533	75.467	.458	.545	.374	223.19	205.04	645.
220.00	1.7322	.39056	83.348	.467	.544	.391	234.07	214.84	671.
240.00	1.6455	.36313	90.535	.477	.546	.406	244.96	224.72	694.
260.00	1.5706	.34073	97.215	.487	.551	.422	255.93	234.72	715.
280.00	1.5046	.32192	103.51	.497	.558	.437	267.02	244.88	734.
300.00	1.4457	.30581	109.50	.508	.565	.452	278.24	255.20	752.
320.00	1.3925	.29176	115.26	.518	.573	.467	289.63	265.71	769.
340.00	1.3441	.27934	120.81	.529	.582	.482	301.18	276.40	785.
360.00	1.2998	.26824	126.20	.540	.591	.496	312.91	287.28	800.
380.00	1.2590	.25823	131.44	.550	.600	.510	324.82	298.36	815.
400.00	1.2211	.24913	136.57	.561	.609	.525	336.92	309.64	830.
420.00	1.1859	.24079	141.59	.571	.619	.539	349.20	321.11	843.
440.00	1.1530	.23312	146.52	.582	.628	.553	361.67	332.78	857.
460.00	1.1222	.22602	151.37	.592	.637	.567	374.33	344.64	870.
480.00	1.0932	.21942	156.15	.602	.647	.580	387.17	356.70	882.
500.00	1.0659	.21326	160.86	.612	.656	.594	400.19	368.94	894.
520.00	1.0401	.20750	165.52	.621	.665	.608	413.40	381.38	906.
540.00	1.0157	.20209	170.12	.631	.674	.621	426.79	393.99	918.
560.00	.9926	.19699	174.67	.640	.683	.635	440.35	406.79	929.
580.00	.9706	.19218	179.18	.649	.691	.648	454.09	419.77	941.
600.00	.9496	.18763	183.65	.658	.700	.661	468.01	432.93	952.
620.00	.9297	.18332	188.08	.667	.709	.675	482.10	446.27	962.
640.00	.9106	.17923	192.47	.676	.717	.688	496.35	459.77	973.
660.00	.8924	.17534	196.84	.684	.725	.701	510.77	473.44	983.
680.00	.8750	.17163	201.17	.693	.733	.714	525.35	487.28	994.
700.00	.8583	.16809	205.48	.701	.741	.726	540.10	501.29	1004.
720.00	.8422	.16470	209.76	.709	.749	.739	555.00	515.45	1014.
740.00	.8268	.16147	214.02	.717	.757	.752	570.06	529.78	1023.
760.00	.8120	.15837	218.25	.725	.764	.764	585.27	544.25	1033.
780.00	.7978	.15539	222.46	.733	.772	.777	600.64	558.89	1043.
800.00	.7841	.15254	226.66	.740	.779	.789	616.15	573.67	1052.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) -S(N.B.T,LIQUID)

200.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		
-40.00	39.0189	68.265	1950.4	.378	.500	-.060	-25.71	-26.66	3459.
-20.00	38.3104	64.062	1785.4	.385	.512	-.036	-15.58	-16.55	3320.
.00	37.5823	59.782	1617.2	.390	.523	-.013	-5.23	-6.21	3171.
20.00	36.8303	55.487	1449.8	.396	.535	.009	5.35	4.35	3014.
40.00	36.0498	51.219	1286.1	.403	.548	.031	16.18	15.15	2849.
60.00	35.2353	47.009	1127.9	.411	.562	.053	27.28	26.23	2677.
80.00	34.3801	42.873	976.24	.420	.579	.075	38.68	37.61	2499.
100.00	33.4752	38.820	831.76	.430	.597	.096	50.44	49.33	2315.
120.00	32.5083	34.847	694.62	.441	.618	.117	62.59	61.45	2126.
140.00	31.4611	30.941	564.73	.453	.643	.139	75.19	74.01	1928.
160.00	30.3044	27.071	441.68	.465	.672	.160	88.33	87.11	1721.
178.33	29.1042	23.505	334.23	.478	.708	.180	100.97	99.70	1516.
178.33	2.2962	.57888	57.953	.456	.586	.349	208.61	192.49	587.
180.00	2.2797	.57212	58.891	.457	.583	.351	209.59	193.35	591.
200.00	2.1116	.50618	69.062	.462	.564	.368	221.03	203.50	625.
220.00	1.9804	.45898	77.820	.470	.557	.385	232.22	213.53	654.
240.00	1.8726	.42298	85.655	.479	.556	.401	243.33	223.57	679.
260.00	1.7811	.39427	92.841	.488	.559	.417	254.47	233.69	702.
280.00	1.7016	.37063	99.545	.498	.564	.432	265.69	243.94	723.
300.00	1.6314	.35066	105.88	.509	.570	.447	277.03	254.34	742.
320.00	1.5686	.33347	111.92	.519	.578	.462	288.51	264.91	760.
340.00	1.5118	.31843	117.73	.530	.586	.477	300.14	275.66	777.
360.00	1.4601	.30510	123.34	.540	.594	.492	311.93	286.59	793.
380.00	1.4127	.29315	128.78	.551	.603	.506	323.90	297.71	808.
400.00	1.3689	.28236	134.09	.561	.612	.520	336.05	309.02	823.
420.00	1.3283	.27252	139.27	.572	.621	.534	348.38	320.52	838.
440.00	1.2905	.26351	144.35	.582	.630	.549	360.89	332.21	851.
460.00	1.2552	.25520	149.34	.592	.639	.562	373.59	344.10	865.
480.00	1.2221	.24751	154.24	.602	.648	.576	386.46	356.18	878.
500.00	1.1909	.24035	159.07	.612	.657	.590	399.52	368.44	890.
520.00	1.1616	.23367	163.84	.622	.666	.604	412.76	380.89	903.
540.00	1.1338	.22741	168.54	.631	.675	.617	426.17	393.53	915.
560.00	1.1075	.22153	173.19	.640	.684	.631	439.76	406.34	926.
580.00	1.0826	.21599	177.79	.649	.693	.644	453.53	419.34	938.
600.00	1.0589	.21076	182.35	.659	.701	.657	467.46	432.51	949.
620.00	1.0364	.20581	186.86	.667	.710	.671	481.57	445.86	960.
640.00	1.0148	.20112	191.33	.676	.718	.684	495.84	459.37	971.
660.00	.9943	.19667	195.77	.685	.726	.697	510.28	473.06	981.
680.00	.9746	.19243	200.18	.693	.734	.710	524.88	486.91	992.
700.00	.9558	.18838	204.55	.701	.742	.722	539.64	500.92	1002.
720.00	.9378	.18453	208.90	.709	.750	.735	554.56	515.10	1012.
740.00	.9205	.18084	213.22	.717	.758	.748	569.64	529.43	1022.
760.00	.9038	.17731	217.51	.725	.765	.760	584.86	543.92	1032.
780.00	.8878	.17394	221.78	.733	.773	.773	600.24	558.56	1041.
800.00	.8725	.17069	226.03	.740	.780	.785	615.77	573.35	1051.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

250.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		
-40.00	39.0444	68.856	1973.2	.377	.500	-.060	-25.56	-26.75	3482.
-20.00	38.3383	64.592	1806.7	.384	.512	-.036	-15.44	-16.65	3342.
.00	37.6130	60.269	1637.4	.390	.523	-.013	-5.09	-6.32	3193.
20.00	36.8645	55.943	1469.2	.395	.534	.009	5.48	4.23	3035.
40.00	36.0884	51.655	1304.9	.402	.547	.031	16.29	15.01	2870.
60.00	35.2793	47.433	1146.3	.410	.562	.053	27.38	26.07	2699.
80.00	34.4308	43.294	994.46	.419	.578	.074	38.77	37.43	2522.
100.00	33.5347	39.244	849.92	.429	.596	.096	50.50	49.12	2340.
120.00	32.5793	35.284	712.90	.440	.616	.117	62.62	61.20	2152.
140.00	31.5482	31.400	583.32	.452	.640	.138	75.18	73.71	1958.
160.00	30.4152	27.568	460.83	.464	.669	.160	88.26	86.74	1755.
180.00	29.1355	23.740	344.82	.478	.706	.182	101.98	100.39	1537.
198.55	27.7388	20.102	241.93	.492	.756	.202	115.51	113.84	1314.
198.55	2.9704	.78813	49.787	.475	.648	.351	213.59	198.01	561.
200.00	2.9481	.77847	50.762	.476	.643	.353	214.52	198.83	564.
220.00	2.6929	.67340	62.713	.479	.604	.371	226.94	209.76	606.
240.00	2.5048	.60229	72.666	.485	.588	.389	238.84	220.37	639.
260.00	2.3554	.54987	81.397	.493	.582	.405	250.54	230.90	668.
280.00	2.2314	.50906	89.296	.502	.582	.421	262.17	241.44	693.
300.00	2.1255	.47604	96.595	.512	.585	.437	273.84	252.07	715.
320.00	2.0331	.44855	103.44	.522	.590	.452	285.58	262.83	736.
340.00	1.9512	.42514	109.93	.532	.596	.467	297.43	273.72	756.
360.00	1.8778	.40485	116.13	.542	.603	.482	309.42	284.78	774.
380.00	1.8114	.38701	122.09	.552	.610	.496	321.55	296.01	791.
400.00	1.7507	.37113	127.87	.563	.619	.511	333.84	307.41	807.
420.00	1.6950	.35686	133.47	.573	.627	.525	346.29	319.00	823.
440.00	1.6436	.34393	138.93	.583	.635	.539	358.92	330.77	838.
460.00	1.5958	.33213	144.27	.593	.644	.553	371.71	342.72	853.
480.00	1.5513	.32130	149.49	.603	.653	.567	384.68	354.86	866.
500.00	1.5097	.31130	154.62	.612	.661	.581	397.82	367.17	880.
520.00	1.4707	.30203	159.67	.622	.670	.595	411.13	379.67	893.
540.00	1.4340	.29340	164.63	.631	.679	.608	424.61	392.35	906.
560.00	1.3994	.28533	169.53	.641	.687	.622	438.27	405.21	918.
580.00	1.3666	.27777	174.36	.650	.695	.635	452.10	418.24	930.
600.00	1.3356	.27067	179.13	.659	.704	.649	466.09	431.45	942.
620.00	1.3061	.26397	183.85	.668	.712	.662	480.25	444.83	954.
640.00	1.2781	.25765	188.52	.676	.720	.675	494.57	458.38	965.
660.00	1.2514	.25166	193.15	.685	.728	.688	509.06	472.09	976.
680.00	1.2260	.24598	197.73	.693	.736	.701	523.70	485.97	987.
700.00	1.2016	.24059	202.28	.702	.744	.714	538.51	500.01	997.
720.00	1.1784	.23545	206.78	.710	.752	.727	553.47	514.20	1008.
740.00	1.1561	.23056	211.26	.718	.759	.740	568.58	528.56	1018.
760.00	1.1347	.22588	215.70	.725	.767	.752	583.84	543.07	1028.
780.00	1.1141	.22142	220.11	.733	.774	.765	599.25	557.73	1038.
800.00	1.0944	.21714	224.49	.741	.782	.777	614.81	572.54	1048.

H* = H(T) - H(N.B,T,LIQUID) AND
S* = S(T) - S(N.B,T,LIQUID)

300.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		
-40.00	39.0696	69.440	1995.9	.376	.499	-.060	-25.41	-26.84	3504.
-20.00	38.3658	65.116	1827.9	.383	.512	-.037	-15.30	-16.75	3363.
.00	37.6434	60.749	1657.5	.389	.523	-.014	-4.96	-6.43	3214.
20.00	36.8984	56.393	1488.5	.395	.534	.009	5.61	4.10	3056.
40.00	36.1264	52.085	1323.6	.401	.547	.031	16.41	14.87	2891.
60.00	35.3225	47.851	1164.6	.409	.561	.053	27.48	25.91	2721.
80.00	34.4806	43.707	1012.5	.418	.577	.074	38.86	37.25	2545.
100.00	33.5929	39.661	867.90	.428	.595	.095	50.57	48.91	2364.
120.00	32.6486	35.711	730.97	.439	.615	.117	62.66	60.96	2178.
140.00	31.6326	31.848	601.65	.451	.638	.138	75.18	73.42	1987.
160.00	30.5216	28.050	479.66	.463	.665	.159	88.20	86.38	1787.
180.00	29.2765	24.277	364.47	.476	.700	.181	101.83	99.93	1576.
200.00	27.8224	20.449	255.20	.491	.749	.203	116.28	114.28	1344.
215.97	26.5023	17.506	179.25	.503	.807	.221	128.40	126.30	1155.
215.97	3.7218	1.0357	41.480	.493	.726	.353	217.24	202.33	532.
220.00	3.6270	.99388	44.690	.492	.704	.357	220.12	204.81	544.
240.00	3.2707	.84408	58.129	.494	.643	.376	233.48	216.51	592.
260.00	3.0209	.74729	69.040	.500	.618	.394	246.05	227.67	629.
280.00	2.8279	.67769	78.482	.507	.607	.411	258.28	238.65	660.
300.00	2.6706	.62437	86.953	.515	.604	.427	270.38	249.59	687.
320.00	2.5379	.58174	94.731	.525	.605	.443	282.46	260.58	712.
340.00	2.4233	.54656	101.99	.534	.608	.458	294.58	271.67	734.
360.00	2.3225	.51682	108.84	.544	.613	.473	306.79	282.88	754.
380.00	2.2326	.49120	115.37	.554	.619	.488	319.11	294.24	773.
400.00	2.1516	.46878	121.64	.564	.626	.503	331.56	305.75	791.
420.00	2.0780	.44891	127.69	.574	.633	.517	344.15	317.43	808.
440.00	2.0106	.43113	133.55	.584	.641	.531	356.89	329.28	825.
460.00	1.9486	.41507	139.24	.594	.649	.546	369.80	341.31	840.
480.00	1.8912	.40046	144.80	.603	.657	.560	382.86	353.51	855.
500.00	1.8378	.38708	150.24	.613	.666	.574	396.09	365.88	870.
520.00	1.7880	.37475	155.56	.623	.674	.587	409.48	378.43	884.
540.00	1.7413	.36335	160.79	.632	.682	.601	423.04	391.16	897.
560.00	1.6975	.35276	165.93	.641	.690	.615	436.77	404.06	910.
580.00	1.6562	.34288	171.00	.650	.699	.628	450.66	417.13	923.
600.00	1.6172	.33363	175.99	.659	.707	.642	464.71	430.38	935.
620.00	1.5803	.32496	180.91	.668	.715	.655	478.92	443.79	947.
640.00	1.5453	.31679	185.78	.677	.723	.668	493.30	457.37	959.
660.00	1.5120	.30909	190.59	.685	.731	.681	507.83	471.11	971.
680.00	1.4804	.30180	195.35	.694	.738	.694	522.52	485.02	982.
700.00	1.4502	.29490	200.06	.702	.746	.707	537.37	499.09	993.
720.00	1.4214	.28835	204.72	.710	.754	.720	552.37	513.31	1004.
740.00	1.3938	.28212	209.35	.718	.761	.733	567.52	527.69	1015.
760.00	1.3674	.27618	213.94	.726	.769	.745	582.82	542.22	1025.
780.00	1.3422	.27052	218.49	.733	.776	.758	598.26	556.90	1036.
800.00	1.3179	.26512	223.01	.741	.783	.770	613.85	571.73	1046.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

350.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP BTU/LB/DEG F)	S*	H* BTU/LB	U	VEL SND FT/SEC
-40.00	39.0945	70.016	2018.4	.376	.499	-.060	-25.27	-26.92	3527.
-20.00	38.3930	65.633	1849.0	.383	.511	-.037	-15.16	-16.84	3385.
.00	37.6734	61.223	1677.5	.388	.522	-.014	-4.82	-6.54	3235.
20.00	36.9317	56.837	1507.6	.394	.534	.009	5.74	3.98	3077.
40.00	36.1639	52.508	1342.2	.401	.546	.031	16.53	14.74	2912.
60.00	35.3651	48.262	1182.8	.409	.560	.052	27.59	25.75	2742.
80.00	34.5296	44.113	1030.4	.418	.576	.074	38.94	37.07	2567.
100.00	33.6499	40.069	885.72	.428	.593	.095	50.63	48.71	2388.
120.00	32.7162	36.130	748.85	.438	.613	.116	62.70	60.72	2204.
140.00	31.7145	32.285	619.75	.450	.636	.137	75.18	73.14	2015.
160.00	30.6238	28.517	498.18	.462	.662	.159	88.14	86.03	1819.
180.00	29.4102	24.793	383.70	.475	.694	.180	101.69	99.49	1613.
200.00	28.0108	21.048	275.63	.489	.739	.202	116.00	113.69	1390.
220.00	26.2850	17.142	172.63	.505	.815	.225	131.46	128.99	1137.
231.35	25.0171	14.717	115.23	.516	.900	.239	141.13	138.54	965.
231.35	4.5801	1.3343	33.054	.509	.838	.353	219.71	205.57	502.
240.00	4.2838	1.2026	40.975	.507	.756	.363	226.57	211.45	532.
260.00	3.8261	1.0096	55.391	.508	.675	.383	240.74	223.81	584.
280.00	3.5163	.88853	66.947	.513	.643	.401	253.88	235.46	624.
300.00	3.2815	.80266	76.889	.520	.629	.418	266.59	246.85	657.
320.00	3.0923	.73744	85.775	.528	.623	.434	279.10	258.16	686.
340.00	2.9340	.68560	93.913	.537	.623	.450	291.56	269.48	711.
360.00	2.7981	.64301	101.49	.546	.625	.465	304.03	280.88	734.
380.00	2.6791	.60714	108.63	.556	.629	.480	316.56	292.39	755.
400.00	2.5735	.57633	115.43	.565	.634	.495	329.20	304.03	775.
420.00	2.4787	.54945	121.94	.575	.641	.510	341.94	315.81	794.
440.00	2.3927	.52569	128.21	.585	.647	.524	354.82	327.75	811.
460.00	2.3142	.50447	134.28	.595	.655	.539	367.85	339.86	828.
480.00	2.2421	.48533	140.17	.604	.662	.553	381.02	352.13	844.
500.00	2.1755	.46795	145.92	.614	.670	.567	394.34	364.57	860.
520.00	2.1136	.45206	151.53	.623	.678	.581	407.82	377.17	874.
540.00	2.0560	.43745	157.02	.632	.686	.595	421.45	389.95	889.
560.00	2.0020	.42395	162.41	.642	.694	.608	435.25	402.90	902.
580.00	1.9514	.41142	167.71	.651	.702	.622	449.21	416.01	916.
600.00	1.9038	.39974	172.91	.660	.710	.635	463.32	429.30	929.
620.00	1.8589	.38883	178.04	.668	.717	.649	477.59	442.75	941.
640.00	1.8164	.37860	183.10	.677	.725	.662	492.02	456.36	954.
660.00	1.7761	.36898	188.10	.685	.733	.675	506.60	470.13	966.
680.00	1.7379	.35991	193.03	.694	.741	.688	521.34	484.07	978.
700.00	1.7015	.35134	197.91	.702	.748	.701	536.23	498.16	989.
720.00	1.6668	.34323	202.73	.710	.756	.714	551.27	512.41	1000.
740.00	1.6337	.33554	207.51	.718	.763	.727	566.46	526.81	1011.
760.00	1.6021	.32823	212.24	.726	.770	.739	581.79	541.36	1022.
780.00	1.5718	.32127	216.93	.733	.778	.752	597.27	556.07	1033.
800.00	1.5428	.31463	221.58	.741	.785	.764	612.90	570.91	1043.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

400.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		FT/SEC
-40.00	39.1191	70.585	2040.8	.375	.499	-.061	-25.12	-27.01	3549.
-20.00	38.4199	66.143	1869.9	.382	.511	-.037	-15.01	-16.94	3406.
.00	37.7030	61.691	1697.3	.388	.522	-.014	-4.68	-6.65	3255.
20.00	36.9647	57.275	1526.7	.393	.533	.008	5.86	3.86	3097.
40.00	36.2009	52.926	1360.6	.400	.545	.030	16.65	14.60	2933.
60.00	35.4071	48.667	1200.8	.408	.559	.052	27.69	25.60	2763.
80.00	34.5777	44.513	1048.2	.417	.575	.073	39.03	36.89	2589.
100.00	33.7058	40.471	903.38	.427	.592	.095	50.70	48.51	2411.
120.00	32.7822	36.539	766.54	.438	.612	.116	62.74	60.48	2229.
140.00	31.7940	32.711	637.62	.449	.633	.137	75.18	72.86	2042.
160.00	30.7224	28.971	516.42	.461	.659	.158	88.10	85.69	1849.
180.00	29.5373	25.290	402.56	.474	.690	.179	101.57	99.06	1648.
200.00	28.1860	21.616	295.48	.488	.731	.201	115.75	113.12	1433.
220.00	26.5577	17.845	194.27	.503	.795	.224	130.95	128.16	1194.
240.00	24.3279	13.684	96.694	.522	.945	.249	148.06	145.02	901.
245.12	23.5277	12.441	71.427	.528	1.039	.256	153.12	149.98	807.
245.12	5.5996	1.7069	24.492	.525	1.020	.352	220.93	207.71	470.
260.00	4.8826	1.3890	39.682	.519	.791	.371	234.00	218.84	529.
280.00	4.3417	1.1628	54.449	.520	.700	.391	248.75	231.70	583.
300.00	3.9806	1.0216	66.316	.525	.664	.409	262.35	243.75	624.
320.00	3.7088	.92181	76.544	.531	.648	.426	275.45	255.49	658.
340.00	3.4911	.84608	85.695	.539	.641	.442	288.33	267.12	687.
360.00	3.3096	.78594	94.077	.548	.639	.458	301.12	278.75	713.
380.00	3.1543	.73657	101.88	.557	.640	.473	313.91	290.44	737.
400.00	3.0187	.69502	109.24	.567	.644	.489	326.75	302.23	759.
420.00	2.8986	.65936	116.24	.576	.649	.503	339.67	314.14	779.
440.00	2.7910	.62827	122.94	.586	.654	.518	352.70	326.18	798.
460.00	2.6936	.60081	129.39	.595	.661	.533	365.85	338.37	816.
480.00	2.6048	.57629	135.63	.605	.668	.547	379.14	350.72	833.
500.00	2.5232	.55421	141.69	.614	.675	.561	392.56	363.23	850.
520.00	2.4480	.53417	147.58	.624	.682	.575	406.13	375.89	865.
540.00	2.3782	.51586	153.34	.633	.690	.589	419.85	388.73	880.
560.00	2.3132	.49903	158.98	.642	.697	.603	433.72	401.72	895.
580.00	2.2525	.48349	164.50	.651	.705	.616	447.74	414.88	909.
600.00	2.1955	.46908	169.93	.660	.713	.630	461.92	428.21	923.
620.00	2.1419	.45567	175.26	.669	.720	.643	476.25	441.69	936.
640.00	2.0914	.44314	180.51	.677	.728	.656	490.73	455.34	949.
660.00	2.0437	.43139	185.68	.686	.735	.670	505.37	469.15	961.
680.00	1.9984	.42035	190.79	.694	.743	.683	520.15	483.11	973.
700.00	1.9555	.40995	195.83	.702	.750	.696	535.08	497.23	985.
720.00	1.9146	.40013	200.81	.710	.758	.708	550.17	511.50	997.
740.00	1.8757	.39084	205.74	.718	.765	.721	565.39	525.93	1008.
760.00	1.8386	.38203	210.61	.726	.772	.734	580.77	540.51	1019.
780.00	1.8031	.37366	215.44	.734	.779	.747	596.28	555.23	1030.
800.00	1.7692	.36569	220.22	.741	.786	.759	611.94	570.10	1041.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

450.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		
-40.00	39.1435	71.147	2063.1	.374	.499	-.061	-24.97	-27.10	3570.
-20.00	38.4465	66.647	1890.7	.381	.511	-.037	-14.87	-17.04	3427.
.00	37.7323	62.153	1717.0	.387	.521	-.014	-4.55	-6.75	3275.
20.00	36.9972	57.707	1545.6	.393	.533	.008	5.99	3.74	3117.
40.00	36.2374	53.338	1378.9	.400	.545	.030	16.76	14.47	2953.
60.00	35.4484	49.067	1218.7	.408	.559	.052	27.80	25.45	2784.
80.00	34.6250	44.907	1065.8	.416	.574	.073	39.12	36.72	2610.
100.00	33.7606	40.865	920.88	.426	.591	.094	50.77	48.31	2433.
120.00	32.8467	36.941	784.05	.437	.610	.115	62.78	60.25	2253.
140.00	31.8713	33.128	655.29	.449	.631	.136	75.20	72.58	2069.
160.00	30.8176	29.412	534.40	.460	.656	.157	88.06	85.36	1879.
180.00	29.6588	25.769	421.06	.473	.685	.179	101.46	98.66	1682.
200.00	28.3499	22.156	314.83	.486	.723	.200	115.53	112.59	1474.
220.00	26.8022	18.494	215.05	.501	.779	.223	130.51	127.40	1246.
240.00	24.7895	14.590	120.45	.518	.890	.247	147.04	143.68	980.
257.60	21.7937	10.291	37.467	.541	1.331	.272	165.23	161.41	654.
257.60	6.8934	2.2009	15.815	.541	1.396	.349	220.53	208.45	435.
260.00	6.6041	2.0720	19.535	.538	1.209	.354	223.63	211.02	451.
280.00	5.3985	1.5439	40.570	.529	.805	.380	242.42	226.99	535.
300.00	4.8056	1.2990	55.127	.531	.717	.400	257.49	240.17	588.
320.00	4.4062	1.1438	67.015	.536	.681	.418	271.43	252.53	628.
340.00	4.1049	1.0331	77.341	.543	.664	.435	284.85	264.57	662.
360.00	3.8633	.94878	86.621	.551	.656	.451	298.04	276.49	692.
380.00	3.6620	.88157	95.147	.559	.654	.467	311.14	288.40	718.
400.00	3.4898	.82627	103.10	.568	.655	.482	324.22	300.35	742.
420.00	3.3396	.77965	110.61	.577	.658	.497	337.34	312.40	764.
440.00	3.2065	.73959	117.75	.587	.662	.512	350.53	324.56	785.
460.00	3.0874	.70464	124.59	.596	.667	.527	363.82	336.85	804.
480.00	2.9796	.67375	131.18	.606	.673	.541	377.23	349.28	822.
500.00	2.8814	.64617	137.55	.615	.680	.555	390.76	361.86	840.
520.00	2.7913	.62132	143.74	.624	.687	.570	404.43	374.59	856.
540.00	2.7082	.59877	149.76	.633	.694	.584	418.23	387.48	872.
560.00	2.6311	.57816	155.65	.643	.701	.597	432.18	400.53	887.
580.00	2.5593	.55923	161.40	.651	.708	.611	446.28	413.74	902.
600.00	2.4923	.54175	167.04	.660	.716	.625	460.52	427.10	916.
620.00	2.4295	.52554	172.57	.669	.723	.638	474.91	440.63	930.
640.00	2.3704	.51045	178.01	.678	.731	.651	489.44	454.31	943.
660.00	2.3146	.49636	183.36	.686	.738	.665	504.13	468.15	956.
680.00	2.2620	.48316	188.64	.694	.745	.678	518.96	482.15	969.
700.00	2.2121	.47075	193.84	.702	.753	.691	533.94	496.30	981.
720.00	2.1648	.45907	198.97	.710	.760	.704	549.07	510.60	993.
740.00	2.1197	.44803	204.04	.718	.767	.717	564.33	525.05	1005.
760.00	2.0769	.43760	209.06	.726	.774	.729	579.74	539.65	1017.
780.00	2.0360	.42770	214.02	.734	.781	.742	595.30	554.40	1028.
800.00	1.9969	.41830	218.93	.741	.788	.754	610.99	569.29	1039.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		
-40.00	39.1676	71.701	2085.2	.374	.498	-.061	-24.82	-27.18	3592.
-20.00	38.4728	67.145	1911.4	.381	.510	-.038	-14.73	-17.13	3447.
.00	37.7612	62.610	1736.6	.386	.521	-.015	-4.41	-6.86	3296.
20.00	37.0294	58.134	1564.3	.392	.532	.008	6.12	3.62	3137.
40.00	36.2735	53.744	1397.1	.399	.544	.030	16.88	14.33	2973.
60.00	35.4892	49.460	1236.4	.407	.558	.051	27.91	25.30	2804.
80.00	34.6715	45.294	1083.3	.416	.573	.073	39.22	36.55	2631.
100.00	33.8144	41.253	938.24	.426	.590	.094	50.85	48.11	2456.
120.00	32.9097	37.335	801.39	.437	.609	.115	62.83	60.02	2277.
140.00	31.9466	33.535	672.75	.448	.630	.136	75.21	72.32	2094.
160.00	30.9096	29.842	552.14	.460	.653	.157	88.04	85.04	1908.
180.00	29.7750	26.233	439.25	.472	.681	.178	101.37	98.26	1715.
200.00	28.5041	22.674	333.73	.485	.717	.200	115.33	112.09	1512.
220.00	27.0244	19.102	235.10	.499	.766	.222	130.13	126.70	1294.
240.00	25.1702	15.384	142.63	.515	.854	.245	146.23	142.55	1047.
260.00	22.3297	11.069	54.407	.537	1.138	.272	165.38	161.23	732.
280.00	6.9574	2.1526	24.434	.543	1.079	.366	233.61	220.31	475.
300.00	5.8263	1.6669	43.192	.538	.805	.390	251.72	235.84	547.
320.00	5.2127	1.4169	57.181	.541	.727	.410	266.92	249.17	597.
340.00	4.7895	1.2537	68.873	.546	.693	.427	281.08	261.76	637.
360.00	4.4670	1.1356	79.149	.553	.677	.444	294.77	274.05	670.
380.00	4.2070	1.0447	88.450	.561	.670	.461	308.22	286.23	700.
400.00	3.9897	.97174	97.034	.570	.667	.476	321.58	298.39	726.
420.00	3.8034	.91147	105.07	.579	.668	.492	334.93	310.60	750.
440.00	3.6407	.86048	112.66	.588	.670	.507	348.30	322.89	772.
460.00	3.4965	.81655	119.90	.597	.674	.521	361.75	335.29	793.
480.00	3.3672	.77815	126.84	.606	.680	.536	375.29	347.81	812.
500.00	3.2503	.74416	133.53	.616	.685	.550	388.94	360.47	830.
520.00	3.1438	.71377	140.01	.625	.692	.565	402.70	373.27	848.
540.00	3.0460	.68638	146.30	.634	.698	.579	416.60	386.22	864.
560.00	2.9557	.66149	152.42	.643	.705	.593	430.63	399.33	880.
580.00	2.8721	.63874	158.40	.652	.712	.606	444.80	412.58	896.
600.00	2.7942	.61783	164.25	.661	.719	.620	459.11	425.99	911.
620.00	2.7214	.59852	169.98	.669	.726	.633	473.56	439.56	925.
640.00	2.6532	.58061	175.60	.678	.733	.647	488.15	453.28	939.
660.00	2.5890	.56394	181.13	.686	.741	.660	502.89	467.15	952.
680.00	2.5285	.54836	186.57	.695	.748	.673	517.77	481.18	965.
700.00	2.4713	.53376	191.93	.703	.755	.686	532.80	495.36	978.
720.00	2.4172	.52005	197.21	.711	.762	.699	547.97	509.69	990.
740.00	2.3658	.50714	202.43	.719	.769	.712	563.28	524.16	1002.
760.00	2.3169	.49494	207.58	.726	.776	.725	578.72	538.79	1014.
780.00	2.2703	.48340	212.67	.734	.783	.738	594.31	553.56	1026.
800.00	2.2259	.47247	217.71	.741	.790	.750	610.04	568.47	1037.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

600.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		
-40.00	39.2151	72.791	2128.9	.372	.498	-.062	-24.52	-27.35	3634.
-20.00	38.5245	68.123	1952.3	.380	.510	-.038	-14.44	-17.32	3488.
.00	37.8182	63.506	1775.4	.385	.520	-.015	-4.13	-7.07	3335.
20.00	37.0926	58.971	1601.6	.391	.531	.007	6.38	3.39	3176.
40.00	36.3441	54.540	1433.1	.398	.543	.029	17.13	14.07	3012.
60.00	35.5689	50.231	1271.6	.406	.557	.051	28.12	25.00	2844.
80.00	34.7624	46.052	1117.9	.415	.572	.072	39.41	36.21	2673.
100.00	33.9191	42.009	972.53	.425	.588	.093	51.00	47.73	2499.
120.00	33.0319	38.101	835.61	.435	.606	.114	62.94	59.58	2323.
140.00	32.0916	34.324	707.13	.447	.626	.135	75.26	71.80	2144.
160.00	31.0852	30.669	586.93	.458	.648	.156	88.00	84.43	1963.
180.00	29.9939	27.118	474.78	.470	.674	.177	101.22	97.51	1777.
200.00	28.7883	23.647	370.38	.483	.705	.198	115.00	111.14	1584.
220.00	27.4182	20.217	273.47	.496	.746	.220	129.49	125.44	1381.
240.00	25.7851	16.756	183.81	.511	.808	.242	144.98	140.68	1162.
260.00	23.6418	13.104	101.33	.527	.931	.266	162.20	157.50	911.
280.00	19.8433	8.6401	27.161	.552	1.507	.297	184.52	178.93	587.
300.00	9.3518	3.0693	17.287	.560	1.436	.363	233.86	221.98	453.
320.00	7.3707	2.2184	36.936	.553	.907	.391	255.63	240.57	530.
340.00	6.4574	1.8382	51.884	.555	.786	.412	272.36	255.16	584.
360.00	5.8660	1.6030	64.389	.559	.735	.431	287.50	268.57	627.
380.00	5.4312	1.4379	75.361	.566	.710	.448	301.93	281.48	662.
400.00	5.0889	1.3134	85.270	.573	.697	.465	315.99	294.17	694.
420.00	4.8076	1.2150	94.393	.581	.692	.481	329.87	306.78	722.
440.00	4.5695	1.1346	102.91	.590	.690	.497	343.68	319.38	747.
460.00	4.3637	1.0672	110.95	.599	.691	.512	357.48	332.03	770.
480.00	4.1828	1.0096	118.59	.608	.693	.527	371.31	344.77	792.
500.00	4.0217	.95959	125.91	.617	.697	.541	385.22	357.61	812.
520.00	3.8769	.91559	132.95	.626	.702	.556	399.20	370.56	832.
540.00	3.7455	.87644	139.76	.635	.707	.570	413.30	383.65	850.
560.00	3.6254	.84131	146.36	.644	.713	.584	427.50	396.87	867.
580.00	3.5150	.80952	152.77	.653	.719	.598	441.82	410.24	884.
600.00	3.4131	.78057	159.03	.661	.726	.612	456.27	423.74	900.
620.00	3.3184	.75405	165.14	.670	.732	.625	470.85	437.39	915.
640.00	3.2301	.72963	171.12	.678	.739	.639	485.57	451.19	930.
660.00	3.1476	.70705	176.99	.687	.746	.652	500.42	465.14	944.
680.00	3.0702	.68607	182.75	.695	.753	.665	515.40	479.23	958.
700.00	2.9973	.66652	188.41	.703	.759	.679	530.52	493.47	972.
720.00	2.9285	.64824	193.98	.711	.766	.692	545.77	507.86	985.
740.00	2.8635	.63111	199.47	.719	.773	.705	561.17	522.39	997.
760.00	2.8019	.61499	204.88	.727	.780	.717	576.69	537.06	1010.
780.00	2.7433	.59980	210.22	.734	.786	.730	592.35	551.88	1022.
800.00	2.6877	.58546	215.50	.742	.793	.743	608.15	566.84	1034.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

700.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		
-40.00	39.2616	73.855	2172.2	.371	.497	-.062	-24.22	-27.52	3676.
-20.00	38.5752	69.078	1992.8	.378	.509	-.038	-14.15	-17.51	3527.
.00	37.8739	64.381	1813.8	.384	.520	-.016	-3.86	-7.28	3373.
20.00	37.1543	59.788	1638.3	.390	.530	.007	6.64	3.16	3214.
40.00	36.4130	55.317	1468.7	.397	.542	.029	17.37	13.81	3050.
60.00	35.6465	50.980	1306.3	.405	.556	.050	28.35	24.71	2883.
80.00	34.8505	46.787	1152.0	.414	.570	.071	39.60	35.88	2713.
100.00	34.0202	42.741	1006.3	.424	.586	.092	51.16	47.35	2541.
120.00	33.1492	38.840	869.23	.434	.604	.113	63.06	59.15	2367.
140.00	32.2297	35.082	740.82	.445	.623	.134	75.32	71.30	2192.
160.00	31.2508	31.457	620.92	.457	.644	.155	87.98	83.84	2015.
180.00	30.1972	27.954	509.30	.469	.668	.176	101.10	96.81	1835.
200.00	29.0461	24.553	405.72	.481	.696	.197	114.73	110.27	1650.
220.00	27.7612	21.228	310.01	.494	.731	.218	128.99	124.32	1459.
240.00	26.2788	17.937	222.09	.507	.779	.240	144.06	139.13	1258.
260.00	24.4685	14.607	142.23	.522	.856	.263	160.33	155.04	1040.
280.00	21.9872	11.077	71.833	.539	1.023	.288	178.85	172.96	795.
300.00	17.4068	6.9350	19.985	.563	1.679	.322	204.22	196.78	526.
320.00	11.0849	3.7453	20.316	.568	1.379	.367	238.90	227.22	478.
340.00	8.7610	2.7323	36.410	.564	.960	.396	261.38	246.59	536.
360.00	7.6164	2.2475	50.731	.566	.826	.417	279.03	262.02	586.
380.00	6.8805	1.9478	63.226	.571	.767	.437	294.90	276.07	628.
400.00	6.3451	1.7385	74.381	.577	.737	.454	309.92	289.50	664.
420.00	5.9275	1.5817	84.541	.584	.721	.471	324.49	302.64	696.
440.00	5.5870	1.4584	93.939	.592	.713	.487	338.82	315.64	724.
460.00	5.3007	1.3582	102.74	.601	.709	.503	353.04	328.60	750.
480.00	5.0545	1.2745	111.05	.609	.709	.518	367.22	341.59	774.
500.00	4.8391	1.2033	118.96	.618	.710	.533	381.41	354.64	796.
520.00	4.6481	1.1417	126.54	.627	.713	.548	395.64	367.77	817.
540.00	4.4769	1.0876	133.83	.636	.717	.562	409.95	381.01	837.
560.00	4.3220	1.0396	140.87	.644	.722	.576	424.34	394.37	856.
580.00	4.1809	.99671	147.70	.653	.727	.590	438.83	407.85	873.
600.00	4.0515	.95797	154.34	.662	.733	.604	453.43	421.46	890.
620.00	3.9322	.92276	160.81	.670	.739	.618	468.15	435.20	907.
640.00	3.8216	.89057	167.13	.679	.745	.632	482.98	449.09	922.
660.00	3.7187	.86100	173.31	.687	.751	.645	497.94	463.11	937.
680.00	3.6226	.83369	179.37	.695	.758	.658	513.03	477.27	952.
700.00	3.5326	.80837	185.31	.703	.764	.672	528.25	491.58	966.
720.00	3.4479	.78480	191.15	.711	.771	.685	543.59	506.02	980.
740.00	3.3682	.76281	196.90	.719	.777	.698	559.07	520.61	993.
760.00	3.2928	.74221	202.55	.727	.784	.711	574.68	535.34	1006.
780.00	3.2215	.72287	208.13	.735	.790	.724	590.41	550.20	1019.
800.00	3.1538	.70466	213.63	.742	.796	.736	606.28	565.20	1031.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

800.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP BTU/LB/DEG F)	S*	H* BTU/LB	U	VEL SND FT/SEC
-40.00	39.3072	74.895	2214.9	.370	.497	-.062	-23.92	-27.69	3716.
-20.00	38.6249	70.011	2032.8	.377	.509	-.039	-13.86	-17.69	3566.
.00	37.9285	65.235	1851.7	.383	.519	-.016	-3.58	-7.48	3411.
20.00	37.2147	60.585	1674.7	.389	.530	.006	6.91	2.93	3251.
40.00	36.4803	56.074	1503.9	.396	.541	.028	17.62	13.56	3088.
60.00	35.7220	51.711	1340.6	.404	.554	.050	28.57	24.43	2921.
80.00	34.9361	47.502	1185.7	.413	.569	.071	39.80	35.56	2752.
100.00	34.1179	43.450	1039.6	.423	.584	.092	51.33	46.99	2581.
120.00	33.2621	39.555	902.30	.433	.601	.113	63.18	58.73	2410.
140.00	32.3618	35.811	773.90	.444	.620	.133	75.39	70.82	2238.
160.00	31.4077	32.212	654.18	.456	.640	.154	87.99	83.28	2064.
180.00	30.3873	28.747	542.94	.468	.663	.175	101.02	96.14	1889.
200.00	29.2826	25.402	439.96	.480	.688	.195	114.52	109.46	1711.
220.00	28.0667	22.159	345.09	.492	.719	.216	128.58	123.31	1530.
240.00	26.6956	18.990	258.31	.505	.758	.238	143.34	137.79	1342.
260.00	25.0914	15.857	179.91	.518	.814	.260	159.02	153.12	1145.
280.00	23.0947	12.698	110.97	.533	.906	.283	176.13	169.72	935.
300.00	20.3189	9.4245	55.167	.550	1.098	.310	195.90	188.62	715.
320.00	16.0301	6.1742	25.257	.567	1.415	.343	221.22	211.99	541.
340.00	11.9796	4.1117	28.041	.572	1.193	.377	248.04	235.68	521.
360.00	9.8400	3.1458	40.468	.572	.955	.403	269.24	254.20	560.
380.00	8.6093	2.6124	53.251	.575	.844	.424	287.10	269.91	602.
400.00	7.7847	2.2684	65.104	.581	.788	.444	303.36	284.35	640.
420.00	7.1765	2.0245	76.005	.587	.757	.461	318.79	298.16	674.
440.00	6.6999	1.8403	86.100	.594	.740	.478	333.75	311.66	705.
460.00	6.3108	1.6950	95.532	.602	.731	.494	348.45	325.00	733.
480.00	5.9837	1.5767	104.42	.611	.726	.510	363.02	338.28	759.
500.00	5.7026	1.4780	112.85	.619	.725	.525	377.53	351.57	783.
520.00	5.4570	1.3939	120.90	.628	.726	.540	392.03	364.90	805.
540.00	5.2394	1.3212	128.63	.637	.728	.555	406.57	378.31	826.
560.00	5.0446	1.2575	136.07	.645	.731	.569	421.16	391.81	846.
580.00	4.8686	1.2011	143.27	.654	.736	.584	435.83	405.42	865.
600.00	4.7084	1.1506	150.26	.662	.740	.598	450.58	419.14	883.
620.00	4.5616	1.1050	157.05	.671	.746	.611	465.44	432.99	900.
640.00	4.4264	1.0637	163.67	.679	.751	.625	480.41	446.96	916.
660.00	4.3012	1.0260	170.14	.688	.757	.639	495.48	461.06	932.
680.00	4.1848	.99134	176.47	.696	.763	.652	510.68	475.30	947.
700.00	4.0762	.95938	182.68	.704	.769	.666	525.99	489.67	962.
720.00	3.9745	.92978	188.76	.712	.775	.679	541.43	504.18	976.
740.00	3.8789	.90226	194.74	.719	.781	.692	556.99	518.83	990.
760.00	3.7890	.87659	200.63	.727	.787	.705	572.68	533.61	1004.
780.00	3.7040	.85257	206.42	.735	.794	.718	588.49	548.52	1017.
800.00	3.6236	.83003	212.13	.742	.800	.730	604.42	563.57	1030.

H* = H(T) - H(N.B.T.LIQUID) AND
S* = S(T) - S(N.B.T.LIQUID)

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F)		- -	- - BTU/LB - -		
-40.00	39.3519	75.912	2257.2	.369	.497	-.063	-23.62	-27.85	3756.
-20.00	38.6736	70.923	2072.4	.376	.508	-.039	-13.57	-17.87	3603.
.00	37.9819	66.070	1889.3	.382	.518	-.016	-3.30	-7.68	3448.
20.00	37.2737	61.364	1710.7	.388	.529	.006	7.18	2.71	3287.
40.00	36.5461	56.812	1538.6	.395	.540	.028	17.87	13.31	3124.
60.00	35.7957	52.422	1374.5	.403	.553	.049	28.80	24.15	2958.
80.00	35.0192	48.198	1218.9	.412	.567	.070	40.00	35.25	2790.
100.00	34.2126	44.139	1072.4	.422	.583	.091	51.50	46.63	2621.
120.00	33.3710	40.246	934.87	.432	.599	.112	63.32	58.33	2451.
140.00	32.4884	36.514	806.40	.443	.617	.133	75.48	70.36	2282.
160.00	31.5569	32.935	686.78	.455	.637	.153	88.02	82.74	2112.
180.00	30.5661	29.503	575.80	.466	.658	.174	100.96	95.51	1941.
200.00	29.5017	26.204	473.25	.478	.682	.194	114.35	108.70	1769.
220.00	28.3430	23.024	378.98	.490	.709	.215	128.25	122.38	1595.
240.00	27.0587	19.947	292.97	.503	.743	.236	142.76	136.60	1417.
260.00	25.5982	16.949	215.44	.515	.786	.258	158.03	151.52	1235.
280.00	23.8734	14.003	147.19	.529	.849	.280	174.34	167.36	1047.
300.00	21.7192	11.083	90.283	.543	.949	.304	192.23	184.56	855.
320.00	18.8562	8.2359	49.964	.558	1.109	.330	212.72	203.89	678.
340.00	15.3518	5.8349	34.053	.571	1.198	.360	236.19	225.35	576.
360.00	12.4601	4.3232	37.427	.576	1.064	.388	259.00	245.63	566.
380.00	10.6165	3.4576	47.381	.579	.927	.412	278.81	263.12	593.
400.00	9.4110	2.9199	58.542	.584	.845	.433	296.45	278.76	627.
420.00	8.5560	2.5539	69.474	.590	.798	.452	312.85	293.38	661.
440.00	7.9079	2.2870	79.855	.597	.771	.469	328.52	307.46	692.
460.00	7.3926	2.0823	89.661	.604	.755	.486	343.76	321.23	721.
480.00	6.9685	1.9193	98.942	.612	.745	.502	358.75	334.85	748.
500.00	6.6101	1.7858	107.76	.620	.741	.518	373.60	348.41	772.
520.00	6.3012	1.6739	116.19	.629	.739	.533	388.39	361.96	796.
540.00	6.0308	1.5784	124.27	.637	.739	.548	403.17	375.56	818.
560.00	5.7910	1.4957	132.05	.646	.741	.563	417.98	389.21	838.
580.00	5.5761	1.4231	139.56	.654	.744	.577	432.83	402.96	858.
600.00	5.3819	1.3587	146.85	.663	.748	.591	447.75	416.80	877.
620.00	5.2050	1.3012	153.92	.671	.752	.605	462.75	430.75	894.
640.00	5.0430	1.2492	160.81	.680	.757	.619	477.85	444.82	912.
660.00	4.8937	1.2021	167.53	.688	.762	.633	493.04	459.01	928.
680.00	4.7554	1.1591	174.11	.696	.768	.647	508.35	473.33	944.
700.00	4.6270	1.1196	180.54	.704	.774	.660	523.76	487.77	959.
720.00	4.5071	1.0831	186.85	.712	.779	.673	539.29	502.34	974.
740.00	4.3948	1.0494	193.04	.720	.785	.686	554.94	517.04	988.
760.00	4.2894	1.0181	199.13	.727	.791	.699	570.71	531.88	1002.
780.00	4.1901	.98883	205.11	.735	.797	.712	586.59	546.84	1016.
800.00	4.0963	.96149	211.01	.742	.803	.725	602.60	561.94	1029.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP - - BTU/LB/DEG F) - -	S*	H*	U - - BTU/LB - -	VEL SND FT/SEC
-40.00	39.3958	76.906	2299.0	.367	.496	-.063	-23.32	-28.01	3795.
-20.00	38.7214	71.816	2111.6	.375	.508	-.040	-13.27	-18.05	3640.
.00	38.0343	66.887	1926.4	.381	.518	-.017	-3.02	-7.88	3483.
20.00	37.3316	62.125	1746.2	.387	.528	.005	7.44	2.49	3323.
40.00	36.6103	57.534	1573.0	.394	.540	.027	18.12	13.06	3159.
60.00	35.8676	53.116	1408.0	.402	.552	.049	29.03	23.87	2994.
80.00	35.1002	48.875	1251.8	.411	.566	.070	40.21	34.94	2826.
100.00	34.3045	44.809	1104.7	.421	.581	.091	51.68	46.29	2659.
120.00	33.4762	40.916	966.97	.432	.597	.111	63.46	57.94	2491.
140.00	32.6100	37.193	838.38	.443	.615	.132	75.58	69.91	2324.
160.00	31.6992	33.632	718.79	.454	.633	.152	88.06	82.22	2157.
180.00	30.7351	30.225	607.97	.465	.654	.173	100.93	94.91	1990.
200.00	29.7061	26.964	505.71	.477	.676	.193	114.22	107.99	1823.
220.00	28.5960	23.836	411.86	.489	.701	.214	127.98	121.51	1655.
240.00	27.3819	20.829	326.36	.501	.730	.234	142.29	135.53	1486.
260.00	26.0290	17.929	249.37	.513	.767	.255	157.25	150.14	1314.
280.00	24.4836	15.123	181.45	.526	.814	.277	173.02	165.47	1141.
300.00	22.6597	12.403	123.88	.539	.879	.300	189.91	181.75	968.
320.00	20.4331	9.7999	79.392	.552	.971	.324	208.36	199.31	804.
340.00	17.7431	7.4567	52.350	.565	1.065	.349	228.78	218.35	676.
360.00	14.9703	5.6520	44.027	.575	1.066	.376	250.29	237.93	615.
380.00	12.7473	4.4596	47.607	.581	.980	.401	270.81	256.29	610.
400.00	11.1697	3.6918	55.965	.586	.896	.423	289.53	272.97	630.
420.00	10.0413	3.1730	65.757	.592	.839	.443	306.85	288.42	658.
440.00	9.1969	2.8016	75.743	.598	.802	.461	323.23	303.11	686.
460.00	8.5367	2.5224	85.497	.606	.779	.478	339.03	317.35	714.
480.00	8.0018	2.3041	94.890	.613	.765	.495	354.46	331.33	741.
500.00	7.5561	2.1281	103.90	.621	.757	.511	369.67	345.18	766.
520.00	7.1764	1.9826	112.55	.630	.753	.527	384.76	358.97	790.
540.00	6.8472	1.8598	120.87	.638	.751	.542	399.79	372.76	812.
560.00	6.5579	1.7546	128.90	.646	.751	.557	414.81	386.59	833.
580.00	6.3005	1.6631	136.65	.655	.753	.571	429.85	400.48	854.
600.00	6.0694	1.5827	144.17	.663	.756	.586	444.94	414.45	873.
620.00	5.8602	1.5112	151.48	.672	.759	.600	460.09	428.51	891.
- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
640.00	5.6694	1.4472	158.59	.680	.764	.614	475.32	442.67	909.
660.00	5.4943	1.3894	165.52	.688	.768	.628	490.63	456.95	926.
680.00	5.3330	1.3368	172.30	.696	.773	.641	506.05	471.35	942.
700.00	5.1835	1.2889	178.93	.704	.778	.655	521.56	485.86	958.
720.00	5.0444	1.2448	185.43	.712	.784	.668	537.19	500.50	973.
740.00	4.9146	1.2042	191.81	.720	.789	.681	552.92	515.26	988.
760.00	4.7930	1.1665	198.07	.728	.795	.694	568.76	530.16	1002.
780.00	4.6787	1.1315	204.23	.735	.801	.707	584.72	545.17	1016.
800.00	4.5711	1.0989	210.30	.743	.807	.720	600.80	560.32	1029.

H* = H(T) - H(N.B.T.LIQUID) AND
S* = S(T) - S(N.B.T.LIQUID)

1200.00 PSI ISOBAR

T	DENSITY	DP/DT	DP/DD	CV	CP	S*	H*	U	VEL SND
DEG F	LB/FT3	PSI/DEG F	PSI/(LB/FT3)	- - BTU/LB/DEG F) - -			- - BTU/LB - -		FT/SEC
-40.00	39.4812	78.833	2381.4	.365	.495	-.064	-22.71	-28.34	3870.
-20.00	38.8144	73.545	2188.8	.373	.507	-.041	-12.68	-18.41	3712.
.00	38.1362	68.469	1999.6	.380	.517	-.018	-2.45	-8.27	3553.
20.00	37.4439	63.598	1816.3	.386	.527	.004	7.98	2.05	3392.
40.00	36.7348	58.928	1640.8	.393	.538	.026	18.63	12.58	3228.
60.00	36.0064	54.456	1473.9	.401	.550	.047	29.51	23.34	3063.
80.00	35.2560	50.179	1316.3	.410	.564	.068	40.64	34.34	2897.
100.00	34.4805	46.095	1168.3	.420	.578	.089	52.06	45.62	2732.
120.00	33.6765	42.199	1029.9	.430	.594	.110	63.77	57.18	2568.
140.00	32.8400	38.486	900.91	.441	.610	.130	75.81	69.05	2404.
160.00	31.9659	34.950	781.19	.452	.628	.151	88.19	81.24	2243.
180.00	31.0481	31.584	670.48	.464	.646	.171	100.92	93.77	2082.
200.00	30.0787	28.380	568.52	.475	.666	.191	114.05	106.66	1923.
220.00	29.0475	25.329	475.12	.487	.688	.211	127.59	119.94	1765.
240.00	27.9411	22.424	390.16	.498	.712	.231	141.58	133.63	1608.
260.00	26.7417	19.657	313.66	.510	.739	.252	156.09	147.78	1452.
280.00	25.4253	17.023	245.85	.522	.771	.273	171.18	162.45	1298.
300.00	23.9604	14.524	187.27	.534	.809	.294	186.98	177.71	1148.
320.00	22.3108	12.175	138.92	.545	.855	.315	203.61	193.66	1005.
340.00	20.4521	10.019	102.25	.557	.904	.338	221.20	210.34	877.
360.00	18.4228	8.1348	78.566	.568	.945	.360	239.73	227.67	778.
380.00	16.3858	6.6100	67.362	.578	.953	.383	258.77	245.22	718.
400.00	14.5616	5.4620	65.530	.586	.927	.406	277.62	262.37	694.
420.00	13.0625	4.6252	69.257	.593	.888	.426	295.77	278.77	693.
440.00	11.8714	4.0118	75.823	.600	.851	.446	313.15	294.44	706.
460.00	10.9233	3.5513	83.699	.607	.822	.464	329.86	309.53	725.
480.00	10.1560	3.1957	92.098	.615	.802	.482	346.09	324.23	746.
500.00	9.5221	2.9136	100.63	.623	.788	.499	361.98	338.66	768.
520.00	8.9885	2.6844	109.10	.631	.779	.515	377.65	352.94	790.
540.00	8.5315	2.4944	117.43	.639	.774	.530	393.17	367.14	812.
560.00	8.1342	2.3339	125.57	.647	.771	.546	408.62	381.32	833.
580.00	7.7846	2.1964	133.52	.656	.770	.561	424.03	395.50	853.
600.00	7.4736	2.0771	141.27	.664	.771	.575	439.44	409.73	872.
620.00	7.1945	1.9723	148.83	.672	.773	.590	454.89	424.02	891.
640.00	6.9420	1.8795	156.21	.681	.776	.604	470.38	438.39	909.
660.00	6.7120	1.7965	163.42	.689	.780	.618	485.94	452.85	926.
680.00	6.5013	1.7218	170.48	.697	.784	.632	501.57	467.41	943.
700.00	6.3072	1.6541	177.40	.705	.788	.646	517.28	482.07	959.
720.00	6.1277	1.5924	184.18	.713	.793	.659	533.09	496.85	975.
740.00	5.9609	1.5358	190.83	.720	.798	.672	548.99	511.73	990.
760.00	5.8053	1.4838	197.37	.728	.803	.686	564.99	526.74	1005.
780.00	5.6598	1.4357	203.80	.736	.808	.699	581.10	541.86	1019.
800.00	5.5232	1.3911	210.13	.743	.813	.712	597.31	557.10	1033.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

1400.00 PSI ISOBAR

T	DENSITY	DP/DT	DP/DD	CV	CP	S*	H*	U	VEL SND
DEG F	LB/FT3	PSI/DEG F	PSI/(LB/FT3)	- - BTU/LB/DEG F) - -			- - BTU/LB - -		FT/SEC
-40.00	39.5638	80.682	2462.1	.363	.495	-.065	-22.10	-28.65	3942.
-20.00	38.9043	75.204	2264.5	.372	.506	-.041	-12.09	-18.75	3781.
.00	38.2345	69.987	2071.4	.378	.516	-.019	-1.88	-8.65	3620.
20.00	37.5520	65.010	1885.1	.384	.525	.003	8.53	1.63	3457.
40.00	36.8543	60.262	1707.2	.391	.536	.025	19.15	12.12	3293.
60.00	36.1392	55.735	1538.4	.400	.548	.046	29.99	22.82	3129.
80.00	35.4044	51.421	1379.5	.409	.561	.067	41.09	33.77	2965.
100.00	34.6473	47.316	1230.4	.418	.575	.088	52.45	44.97	2801.
120.00	33.8651	43.412	1091.2	.429	.590	.109	64.11	56.46	2640.
140.00	33.0548	39.704	961.74	.440	.606	.129	76.08	68.24	2480.
160.00	32.2125	36.184	841.73	.451	.623	.149	88.36	80.32	2322.
180.00	31.3337	32.846	730.90	.462	.640	.169	100.99	92.72	2167.
200.00	30.4129	29.681	628.96	.474	.658	.189	113.98	105.46	2014.
220.00	29.4435	26.684	535.67	.485	.678	.209	127.34	118.54	1863.
240.00	28.4173	23.846	450.84	.496	.699	.229	141.10	131.98	1715.
260.00	27.3242	21.163	374.38	.508	.721	.249	155.29	145.81	1570.
280.00	26.1519	18.631	306.32	.519	.746	.269	169.96	160.05	1429.
300.00	24.8865	16.251	246.85	.530	.773	.289	185.14	174.73	1292.
320.00	23.5143	14.031	196.36	.541	.803	.310	200.90	189.88	1162.
340.00	22.0275	11.989	155.38	.553	.835	.330	217.28	205.51	1043.
360.00	20.4362	10.154	124.44	.563	.864	.351	234.27	221.59	941.
380.00	18.7863	8.5628	103.59	.573	.885	.373	251.78	237.99	861.
400.00	17.1633	7.2426	91.913	.583	.891	.394	269.57	254.48	807.
420.00	15.6628	6.1880	87.495	.592	.882	.414	287.33	270.78	778.
440.00	14.3460	5.3636	88.110	.600	.864	.434	304.79	286.73	767.
460.00	13.2252	4.7211	91.891	.608	.844	.452	321.86	302.27	769.
480.00	12.2818	4.2159	97.545	.616	.826	.470	338.55	317.46	779.
500.00	11.4863	3.8126	104.26	.624	.811	.488	354.91	332.36	793.
520.00	10.8101	3.4851	111.53	.632	.801	.504	371.02	347.06	810.
540.00	10.2292	3.2148	119.07	.640	.793	.520	386.96	361.63	827.
560.00	9.7246	2.9881	126.72	.648	.789	.536	402.77	376.13	846.
580.00	9.2817	2.7953	134.36	.656	.786	.551	418.52	390.61	864.
600.00	8.8891	2.6293	141.94	.665	.785	.566	434.23	405.09	882.
620.00	8.5381	2.4846	149.42	.673	.786	.581	449.95	419.60	900.
640.00	8.2220	2.3574	156.80	.681	.788	.595	465.68	434.17	917.
660.00	7.9352	2.2445	164.06	.689	.790	.610	481.46	448.81	934.
680.00	7.6734	2.1436	171.20	.697	.793	.624	497.29	463.53	951.
700.00	7.4333	2.0526	178.22	.705	.797	.637	513.20	478.34	967.
720.00	7.2119	1.9702	185.12	.713	.801	.651	529.17	493.25	982.
740.00	7.0069	1.8952	191.92	.721	.805	.665	545.24	508.26	997.
760.00	6.8163	1.8264	198.61	.728	.810	.678	561.39	523.38	1012.
780.00	6.6385	1.7632	205.19	.736	.815	.691	577.63	538.61	1026.
800.00	6.4722	1.7048	211.68	.743	.820	.704	593.98	553.95	1041.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV - - BTU/LB/DEG F) - -	CP	S*	H* - - BTU/LB - -	U	VEL SND FT/SEC
-40.00	39.6438	82.459	2541.3	.362	.494	-.065	-21.49	-28.96	4012.
-20.00	38.9912	76.800	2338.8	.370	.505	-.042	-11.50	-19.09	3847.
.00	38.3294	71.445	2141.9	.377	.515	-.020	-1.30	-9.02	3684.
20.00	37.6562	66.366	1952.7	.383	.524	.003	9.09	1.22	3521.
40.00	36.9693	61.542	1772.4	.390	.535	.024	19.68	11.67	3356.
60.00	36.2666	56.959	1601.8	.398	.547	.045	30.49	22.32	3192.
80.00	35.5462	52.608	1441.4	.408	.559	.066	41.54	33.21	3029.
100.00	34.8059	48.479	1291.2	.417	.573	.087	52.87	44.36	2867.
120.00	34.0436	44.563	1151.2	.428	.588	.107	64.47	55.77	2708.
140.00	33.2566	40.855	1021.1	.439	.603	.127	76.37	67.47	2551.
160.00	32.4421	37.344	900.64	.450	.619	.147	88.58	79.46	2397.
180.00	31.5968	34.025	789.53	.461	.635	.167	101.12	91.75	2246.
200.00	30.7169	30.889	687.42	.472	.652	.187	113.98	104.35	2098.
220.00	29.7978	27.928	594.02	.484	.670	.207	127.20	117.26	1953.
240.00	28.8344	25.138	509.07	.495	.688	.227	140.78	130.51	1812.
260.00	27.8205	22.511	432.41	.506	.708	.246	154.73	144.09	1675.
280.00	26.7497	20.045	363.92	.517	.728	.266	169.09	158.02	1542.
300.00	25.6152	17.738	303.61	.528	.750	.286	183.88	172.32	1414.
320.00	24.4112	15.594	251.55	.539	.773	.305	199.11	186.98	1294.
340.00	23.1357	13.621	207.91	.550	.796	.325	214.80	202.00	1182.
360.00	21.7946	11.829	172.82	.560	.819	.345	230.96	217.37	1082.
380.00	20.4071	10.236	146.23	.570	.838	.365	247.53	233.02	998.
400.00	19.0096	8.8544	127.73	.580	.850	.385	264.42	248.84	932.
420.00	17.6515	7.6880	116.36	.589	.855	.405	281.49	264.71	885.
440.00	16.3809	6.7245	110.77	.598	.852	.424	298.56	280.48	855.
460.00	15.2306	5.9393	109.50	.607	.843	.443	315.51	296.07	840.
480.00	14.2121	5.3016	111.27	.615	.833	.461	332.27	311.44	836.
500.00	13.3213	4.7818	115.07	.624	.822	.478	348.82	326.60	839.
520.00	12.5448	4.3546	120.20	.632	.814	.495	365.18	341.58	847.
540.00	11.8668	3.9997	126.17	.640	.807	.511	381.38	356.43	859.
560.00	11.2719	3.7014	132.66	.648	.802	.527	397.46	371.19	872.
580.00	10.7466	3.4478	139.45	.657	.799	.543	413.46	385.91	887.
600.00	10.2795	3.2299	146.42	.665	.797	.558	429.42	400.61	902.
620.00	9.8614	3.0406	153.46	.673	.797	.573	445.36	415.33	918.
640.00	9.4847	2.8748	160.52	.681	.798	.588	461.30	430.09	934.
660.00	9.1432	2.7283	167.56	.689	.800	.602	477.28	444.89	949.
680.00	8.8319	2.5978	174.55	.697	.802	.616	493.29	459.76	965.
700.00	8.5466	2.4808	181.48	.705	.805	.630	509.36	474.71	980.
720.00	8.2840	2.3752	188.34	.713	.808	.644	525.49	489.75	995.
740.00	8.0413	2.2793	195.12	.721	.812	.657	541.70	504.88	1010.
760.00	7.8161	2.1919	201.82	.729	.816	.671	557.99	520.11	1024.
780.00	7.6063	2.1118	208.45	.736	.821	.684	574.36	535.44	1038.
800.00	7.4103	2.0381	214.99	.743	.825	.697	590.83	550.87	1052.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

1800.00 PSI ISOBAR

T	DENSITY	DP/DT	DP/DD	CV	CP	S*	H*	U	VEL SND
DEG F	LB/FT3	PSI/DEG F	PSI/(LB/FT3)	- - BTU/LB/DEG F) - -			- - BTU/LB - -		FT/SEC
-40.00	39.7213	84.170	2619.2	.360	.493	-.066	-20.88	-29.26	4079.
-20.00	39.0754	78.336	2411.9	.369	.504	-.043	-10.90	-19.42	3911.
.00	38.4213	72.849	2211.3	.375	.514	-.020	-.72	-9.39	3746.
20.00	37.7569	67.669	2019.1	.382	.523	.002	9.65	.83	3582.
40.00	37.0801	62.771	1836.4	.389	.533	.023	20.21	11.23	3417.
60.00	36.3891	58.134	1664.0	.397	.545	.044	30.99	21.84	3253.
80.00	35.6821	53.744	1502.1	.407	.557	.065	42.01	32.68	3090.
100.00	34.9573	49.589	1350.8	.416	.571	.086	53.29	43.77	2930.
120.00	34.2130	45.660	1209.9	.427	.585	.106	64.85	55.11	2772.
140.00	33.4471	41.947	1079.1	.438	.600	.126	76.69	66.74	2618.
160.00	32.6573	38.441	958.13	.449	.615	.146	88.84	78.64	2467.
180.00	31.8413	35.134	846.61	.460	.630	.166	101.29	90.83	2319.
200.00	30.9964	32.017	744.19	.471	.646	.185	114.06	103.31	2175.
220.00	30.1194	29.083	650.52	.483	.663	.205	127.15	116.09	2036.
240.00	29.2069	26.326	565.30	.494	.680	.225	140.58	129.17	1900.
260.00	28.2554	23.738	488.29	.505	.697	.244	154.35	142.56	1769.
280.00	27.2611	21.317	419.28	.516	.715	.263	168.48	156.26	1642.
300.00	26.2207	19.059	358.14	.527	.734	.283	182.97	170.27	1522.
320.00	25.1320	16.964	304.80	.537	.753	.302	197.84	184.59	1407.
340.00	23.9951	15.033	259.21	.548	.772	.321	213.09	199.21	1302.
360.00	22.8145	13.273	221.30	.558	.790	.341	228.72	214.12	1205.
380.00	21.6010	11.688	190.93	.568	.806	.360	244.69	229.27	1121.
400.00	20.3737	10.283	167.77	.578	.820	.379	260.96	244.61	1050.
420.00	19.1589	9.0612	151.21	.588	.828	.398	277.44	260.06	994.
440.00	17.9866	8.0153	140.42	.597	.832	.417	294.06	275.54	953.
460.00	16.8834	7.1321	134.35	.606	.832	.435	310.71	290.98	925.
480.00	15.8675	6.3923	131.98	.615	.828	.453	327.31	306.32	908.
500.00	14.9470	5.7744	132.36	.623	.823	.470	343.83	321.55	901.
520.00	14.1211	5.2570	134.75	.632	.818	.487	360.25	336.66	900.
540.00	13.3837	4.8218	138.55	.640	.813	.504	376.56	351.67	904.
560.00	12.7259	4.4530	143.35	.648	.810	.520	392.79	366.61	911.
580.00	12.1380	4.1378	148.82	.657	.807	.535	408.95	381.51	921.
600.00	11.6108	3.8663	154.75	.665	.806	.551	425.08	396.39	932.
620.00	11.1361	3.6303	160.99	.673	.805	.566	441.19	411.28	945.
640.00	10.7066	3.4236	167.41	.682	.806	.581	457.30	426.19	958.
660.00	10.3162	3.2411	173.96	.690	.807	.595	473.43	441.14	972.
680.00	9.9597	3.0788	180.57	.698	.809	.609	489.59	456.15	986.
700.00	9.6328	2.9337	187.21	.706	.812	.623	505.80	471.22	1000.
720.00	9.3318	2.8030	193.84	.713	.815	.637	522.07	486.38	1013.
740.00	9.0535	2.6846	200.45	.721	.819	.651	538.41	501.61	1027.
760.00	8.7953	2.5770	207.03	.729	.822	.665	554.81	516.94	1041.
780.00	8.5549	2.4786	213.56	.736	.826	.678	571.30	532.36	1054.
800.00	8.3304	2.3882	220.04	.744	.831	.691	587.87	547.89	1068.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

2000.00 PSI ISOBAR

T	DENSITY	DP/DT	DP/DD	CV	CP	S*	H*	U	VEL SND
DEG F	LB/FT3	PSI/DEG F	PSI/(LB/FT3)	- -	BTU/LB/DEG F)	- -	- -	BTU/LB - -	FT/SEC
-40.00	39.7965	85.820	2695.8	.359	.493	-.067	-20.26	-29.56	4144.
-20.00	39.1571	79.817	2483.8	.367	.503	-.044	-10.29	-19.75	3973.
.00	38.5104	74.201	2279.6	.374	.513	-.021	-.13	-9.74	3806.
20.00	37.8544	68.925	2084.5	.381	.522	.001	10.21	.44	3640.
40.00	37.1872	63.953	1899.5	.388	.532	.022	20.75	10.80	3475.
60.00	36.5071	59.262	1725.2	.397	.543	.043	31.51	21.37	3311.
80.00	35.8126	54.833	1561.8	.406	.556	.064	42.50	32.16	3150.
100.00	35.1023	50.653	1409.3	.416	.569	.085	53.74	43.19	2990.
120.00	34.3745	46.707	1267.4	.426	.582	.105	65.25	54.48	2834.
140.00	33.6277	42.987	1135.9	.437	.597	.125	77.04	66.03	2682.
160.00	32.8602	39.481	1014.3	.448	.611	.145	89.12	77.86	2533.
180.00	32.0701	36.181	902.34	.459	.626	.164	101.50	89.96	2389.
200.00	31.2556	33.078	799.50	.471	.642	.184	114.18	102.34	2248.
220.00	30.4145	30.163	705.46	.482	.657	.203	127.17	115.00	2112.
240.00	29.5446	27.429	619.86	.493	.673	.223	140.48	127.95	1981.
260.00	28.6437	24.870	542.39	.504	.689	.242	154.10	141.18	1855.
280.00	27.7099	22.480	472.80	.515	.705	.261	168.05	154.69	1733.
300.00	26.7415	20.255	410.86	.526	.722	.280	182.32	168.48	1618.
320.00	25.7380	18.192	356.39	.536	.738	.299	196.92	182.54	1509.
340.00	24.7004	16.291	309.22	.547	.755	.318	211.86	196.87	1407.
360.00	23.6324	14.551	269.19	.557	.770	.337	227.11	211.45	1314.
380.00	22.5413	12.974	236.06	.567	.785	.355	242.67	226.25	1231.
400.00	21.4387	11.559	209.52	.577	.797	.374	258.50	241.23	1159.
420.00	20.3404	10.307	189.10	.586	.807	.392	274.55	256.35	1099.
440.00	19.2650	9.2108	174.19	.596	.814	.411	290.77	271.56	1051.
460.00	18.2313	8.2626	164.04	.605	.818	.429	307.10	286.80	1014.
480.00	17.2547	7.4488	157.85	.614	.819	.446	323.47	302.02	988.
500.00	16.3462	6.7540	154.83	.623	.818	.464	339.85	317.21	972.
520.00	15.5107	6.1615	154.29	.631	.817	.480	356.20	332.34	962.
540.00	14.7482	5.6556	155.64	.640	.815	.497	372.52	347.42	959.
560.00	14.0556	5.2220	158.39	.648	.813	.513	388.79	362.46	960.
580.00	13.4275	4.8485	162.19	.657	.812	.529	405.04	377.47	964.
600.00	12.8578	4.5247	166.76	.665	.811	.544	421.26	392.48	971.
620.00	12.3402	4.2423	171.88	.674	.811	.559	437.48	407.49	980.
640.00	11.8686	3.9943	177.40	.682	.812	.574	453.70	422.52	990.
660.00	11.4378	3.7752	183.21	.690	.813	.589	469.95	437.59	1001.
680.00	11.0429	3.5802	189.22	.698	.815	.603	486.23	452.71	1012.
700.00	10.6797	3.4059	195.36	.706	.817	.618	502.55	467.90	1024.
720.00	10.3444	3.2489	201.59	.714	.820	.632	518.93	483.15	1037.
740.00	10.0340	3.1071	207.88	.721	.824	.645	535.37	498.49	1049.
760.00	9.7457	2.9781	214.19	.729	.827	.659	551.88	513.90	1062.
780.00	9.4771	2.8605	220.51	.736	.831	.672	568.47	529.41	1074.
800.00	9.2262	2.7526	226.82	.744	.835	.686	585.13	545.02	1087.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F)		- -	- - BTU/LB - -		
-40.00	39.9759	89.701	2882.1	.356	.491	-.069	-18.71	-30.28	4297.
-20.00	39.3515	83.301	2659.0	.365	.502	-.046	-8.77	-20.53	4119.
.00	38.7221	77.382	2445.9	.372	.511	-.023	1.35	-10.60	3948.
20.00	38.0855	71.875	2243.7	.379	.519	-.001	11.65	-.50	3779.
40.00	37.4402	66.727	2053.1	.386	.529	.020	22.13	9.78	3612.
60.00	36.7850	61.904	1874.2	.395	.540	.041	32.83	20.25	3448.
80.00	36.1187	57.378	1707.0	.404	.552	.062	43.74	30.93	3288.
100.00	35.4402	53.128	1551.4	.414	.564	.082	54.90	41.85	3131.
120.00	34.7486	49.137	1407.0	.425	.577	.102	66.32	53.00	2978.
140.00	34.0430	45.389	1273.4	.436	.591	.122	78.00	64.41	2829.
160.00	33.3225	41.873	1150.1	.447	.605	.142	89.95	76.07	2686.
180.00	32.5864	38.576	1036.6	.458	.618	.161	102.18	87.98	2547.
200.00	31.8337	35.488	932.44	.470	.632	.180	114.68	100.15	2413.
220.00	31.0638	32.598	837.15	.481	.646	.199	127.47	112.58	2284.
240.00	30.2760	29.897	750.29	.492	.660	.218	140.54	125.26	2161.
260.00	29.4698	27.378	671.46	.503	.674	.237	153.88	138.18	2043.
280.00	28.6450	25.032	600.28	.514	.688	.256	167.50	151.35	1931.
300.00	27.8019	22.852	536.39	.524	.701	.274	181.40	164.75	1824.
320.00	26.9412	20.834	479.48	.535	.715	.293	195.56	178.39	1724.
340.00	26.0646	18.970	429.24	.545	.728	.311	209.99	192.24	1630.
360.00	25.1745	17.257	385.34	.555	.740	.329	224.67	206.29	1543.
380.00	24.2747	15.689	347.48	.565	.752	.347	239.60	220.54	1464.
400.00	23.3704	14.262	315.32	.575	.763	.365	254.75	234.95	1393.
420.00	22.4678	12.972	288.47	.585	.773	.383	270.11	249.52	1330.
440.00	21.5743	11.811	266.52	.594	.782	.400	285.66	264.21	1275.
460.00	20.6978	10.774	249.00	.604	.789	.417	301.36	279.01	1228.
480.00	19.8460	9.8514	235.43	.613	.795	.434	317.20	293.89	1190.
500.00	19.0261	9.0347	225.30	.622	.800	.451	333.15	308.83	1159.
520.00	18.2436	8.3137	218.12	.631	.803	.468	349.18	323.82	1135.
540.00	17.5025	7.6785	213.44	.640	.806	.484	365.28	338.85	1117.
560.00	16.8051	7.1189	210.82	.648	.809	.500	381.44	353.91	1105.
580.00	16.1518	6.6256	209.90	.657	.811	.516	397.64	368.99	1096.
600.00	15.5420	6.1897	210.36	.665	.813	.531	413.88	384.11	1092.
620.00	14.9741	5.8038	211.94	.674	.815	.546	430.17	399.27	1091.
- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
640.00	14.4458	5.4607	214.42	.682	.818	.561	446.50	414.47	1092.
660.00	13.9545	5.1548	217.62	.690	.820	.576	462.87	429.72	1095.
680.00	13.4975	4.8808	221.40	.698	.823	.591	479.30	445.03	1100.
700.00	13.0718	4.6345	225.63	.706	.826	.605	495.79	460.39	1106.
720.00	12.6750	4.4122	230.22	.714	.829	.619	512.33	475.83	1113.
740.00	12.3044	4.2107	235.11	.722	.832	.633	528.94	491.34	1121.
760.00	11.9579	4.0274	240.22	.729	.836	.647	545.63	506.94	1130.
780.00	11.6332	3.8601	245.51	.737	.840	.660	562.38	522.61	1139.
800.00	11.3284	3.7067	250.94	.744	.844	.674	579.22	538.38	1149.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

3000.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP BTU/LB/DEG F)	S*	H*	U BTU/LB	VEL SND FT/SEC
-40.00	40.1441	93.277	3062.0	.353	.490	-.071	-17.14	-30.97	4440.
-20.00	39.5338	86.511	2828.4	.362	.500	-.048	-7.24	-21.28	4255.
.00	38.9200	80.311	2606.8	.370	.509	-.025	2.85	-11.41	4078.
20.00	38.3010	74.387	2397.8	.377	.517	-.003	13.11	-1.38	3907.
40.00	37.6753	69.273	2201.5	.385	.527	.018	23.55	8.81	3739.
60.00	37.0420	64.323	2018.0	.393	.537	.039	34.19	19.20	3575.
80.00	36.4001	59.701	1847.1	.403	.548	.059	45.04	29.79	3414.
100.00	35.7489	55.380	1688.4	.413	.561	.080	56.13	40.60	3259.
120.00	35.0879	51.338	1541.3	.424	.573	.100	67.47	51.64	3108.
140.00	34.4165	47.557	1405.4	.435	.586	.119	79.06	62.92	2963.
160.00	33.7343	44.019	1280.2	.446	.599	.139	90.90	74.45	2822.
180.00	33.0409	40.712	1164.9	.458	.612	.158	103.02	86.21	2688.
200.00	32.3363	37.623	1059.2	.469	.625	.177	115.39	98.22	2558.
220.00	31.6201	34.739	962.39	.481	.638	.196	128.03	110.47	2435.
240.00	30.8924	32.050	874.05	.492	.651	.214	140.92	122.95	2317.
260.00	30.1534	29.546	793.67	.503	.664	.233	154.07	135.66	2205.
280.00	29.4035	27.218	720.81	.514	.676	.251	167.47	148.59	2098.
300.00	28.6433	25.057	655.06	.524	.688	.270	181.12	161.74	1997.
320.00	27.8739	23.054	596.02	.535	.700	.288	195.01	175.09	1903.
340.00	27.0966	21.204	543.30	.545	.712	.305	209.13	188.64	1814.
360.00	26.3135	19.498	496.54	.555	.723	.323	223.48	202.38	1732.
380.00	25.5269	17.929	455.40	.565	.734	.341	238.04	216.29	1656.
400.00	24.7397	16.492	419.49	.575	.744	.358	252.81	230.37	1586.
420.00	23.9555	15.179	388.47	.585	.753	.375	267.78	244.60	1523.
440.00	23.1781	13.984	361.96	.594	.762	.392	282.93	258.97	1467.
460.00	22.4115	12.900	339.59	.604	.770	.409	298.24	273.47	1417.
480.00	21.6599	11.920	320.97	.613	.777	.426	313.71	288.08	1374.
500.00	20.9273	11.036	305.73	.622	.784	.442	329.31	302.79	1336.
520.00	20.2172	10.240	293.50	.631	.789	.459	345.04	317.58	1305.
540.00	19.5326	9.5243	283.90	.640	.795	.475	360.89	332.47	1279.
560.00	18.8759	8.8821	276.61	.649	.800	.490	376.83	347.42	1258.
580.00	18.2486	8.3057	271.31	.657	.804	.506	392.87	362.45	1241.
600.00	17.6516	7.7881	267.73	.666	.808	.521	409.00	377.55	1228.
620.00	17.0850	7.3228	265.60	.674	.812	.536	425.20	392.71	1218.
640.00	16.5486	6.9039	264.72	.682	.816	.551	441.49	407.94	1212.
660.00	16.0414	6.5259	264.88	.691	.820	.566	457.85	423.25	1208.
680.00	15.5626	6.1843	265.93	.699	.824	.581	474.30	438.62	1206.
700.00	15.1107	5.8746	267.72	.707	.828	.595	490.81	454.07	1206.
720.00	14.6844	5.5931	270.14	.714	.832	.609	507.41	469.60	1208.
740.00	14.2821	5.3366	273.08	.722	.836	.623	524.08	485.21	1211.
760.00	13.9022	5.1022	276.46	.730	.840	.637	540.84	500.90	1215.
780.00	13.5434	4.8873	280.21	.737	.844	.651	557.67	516.68	1220.
800.00	13.2041	4.6899	284.27	.745	.848	.664	574.60	532.55	1225.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

3500.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		FT/SEC
-40.00	40.3029	96.588	3236.3	.351	.489	-.072	-15.57	-31.64	4572.
-20.00	39.7056	89.483	2992.6	.361	.499	-.049	-5.69	-22.00	4381.
.00	39.1063	83.021	2762.9	.368	.507	-.027	4.37	-12.19	4200.
20.00	38.5032	77.094	2547.3	.376	.515	-.005	14.60	-2.23	4026.
40.00	37.8953	71.623	2345.6	.384	.525	.016	24.99	7.90	3856.
60.00	37.2815	66.552	2157.6	.393	.535	.037	35.59	18.21	3691.
80.00	36.6613	61.837	1982.9	.402	.546	.057	46.39	28.72	3531.
100.00	36.0340	57.446	1820.9	.413	.557	.077	57.42	39.44	3377.
120.00	35.3993	53.351	1671.2	.424	.569	.097	68.68	50.39	3228.
140.00	34.7569	49.531	1532.9	.435	.582	.117	80.20	61.56	3084.
160.00	34.1068	45.967	1405.6	.446	.595	.136	91.96	72.97	2947.
180.00	33.4488	42.643	1288.5	.458	.607	.155	103.98	84.61	2815.
200.00	32.7830	39.544	1181.0	.469	.620	.174	116.25	96.49	2689.
220.00	32.1095	36.656	1082.5	.481	.632	.193	128.76	108.59	2570.
240.00	31.4287	33.967	992.59	.492	.644	.211	141.53	120.92	2455.
260.00	30.7409	31.466	910.59	.503	.656	.229	154.53	133.46	2347.
280.00	30.0467	29.142	836.05	.514	.668	.248	167.78	146.22	2245.
300.00	29.3469	26.985	768.49	.525	.679	.266	181.25	159.18	2148.
320.00	28.6425	24.986	707.49	.535	.690	.283	194.94	172.33	2057.
340.00	27.9346	23.137	652.62	.546	.701	.301	208.86	185.67	1972.
360.00	27.2249	21.429	603.49	.556	.711	.318	222.99	199.20	1893.
380.00	26.5149	19.855	559.73	.566	.721	.336	237.32	212.89	1819.
400.00	25.8067	18.406	520.95	.576	.731	.353	251.84	226.74	1752.
420.00	25.1024	17.075	486.80	.585	.740	.370	266.55	240.75	1690.
440.00	24.4044	15.856	456.94	.595	.749	.386	281.44	254.90	1633.
460.00	23.7152	14.740	431.01	.604	.757	.403	296.49	269.18	1582.
480.00	23.0373	13.722	408.69	.614	.764	.419	311.71	283.59	1537.
500.00	22.3730	12.794	389.64	.623	.772	.435	327.07	298.12	1497.
520.00	21.7246	11.949	373.55	.632	.778	.451	342.57	312.76	1461.
540.00	21.0942	11.180	360.12	.641	.785	.467	358.21	327.50	1431.
560.00	20.4833	10.482	349.07	.649	.791	.483	373.97	342.35	1404.
580.00	19.8934	9.8476	340.11	.658	.797	.498	389.84	357.28	1382.
600.00	19.3254	9.2712	333.03	.666	.802	.514	405.83	372.31	1363.
620.00	18.7800	8.7473	327.58	.675	.807	.529	421.92	387.43	1348.
640.00	18.2573	8.2706	323.56	.683	.812	.543	438.11	402.64	1336.
660.00	17.7575	7.8364	320.79	.691	.817	.558	454.41	417.93	1326.
680.00	17.2801	7.4403	319.12	.699	.822	.573	470.80	433.32	1319.
700.00	16.8247	7.0785	318.39	.707	.827	.587	487.28	448.79	1314.
720.00	16.3905	6.7472	318.49	.715	.831	.601	503.86	464.35	1310.
740.00	15.9769	6.4434	319.30	.723	.836	.615	520.54	480.00	1309.
760.00	15.5830	6.1642	320.73	.730	.841	.629	537.30	495.74	1308.
780.00	15.2079	5.9071	322.69	.738	.845	.643	554.16	511.57	1309.
800.00	14.8505	5.6699	325.12	.745	.850	.656	571.11	527.50	1311.

H* = H(T) - H(N,B,T,LIQUID) AND
S* = S(T) - S(N,B,T,LIQUID)

4000.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		
-40.00	40.4535	99.667	3405.8	.349	.488	-.074	-13.98	-32.28	4696.
-20.00	39.8684	92.248	3152.4	.359	.498	-.051	-4.12	-22.69	4499.
.00	39.2824	85.541	2914.9	.367	.506	-.029	5.91	-12.93	4314.
20.00	38.6941	79.423	2692.8	.375	.514	-.007	16.10	-3.03	4137.
40.00	38.1023	73.804	2485.8	.383	.523	.014	26.47	7.04	3966.
60.00	37.5063	68.617	2293.4	.392	.532	.035	37.02	17.28	3800.
80.00	36.9054	63.813	2114.9	.402	.543	.055	47.77	27.71	3640.
100.00	36.2992	59.352	1949.8	.413	.555	.075	58.75	38.36	3486.
120.00	35.6877	55.204	1797.2	.424	.566	.095	69.96	49.22	3338.
140.00	35.0706	51.344	1656.5	.435	.579	.114	81.41	60.30	3197.
160.00	34.4479	47.751	1527.0	.447	.591	.133	93.10	71.61	3061.
180.00	33.8198	44.405	1408.0	.458	.603	.152	105.04	83.15	2932.
200.00	33.1864	41.290	1298.7	.470	.615	.171	117.22	94.92	2809.
220.00	32.5481	38.392	1198.5	.481	.627	.190	129.65	106.90	2692.
240.00	31.9053	35.697	1106.9	.492	.639	.208	142.31	119.11	2581.
260.00	31.2583	33.191	1023.2	.504	.650	.226	155.20	131.52	2476.
280.00	30.6080	30.864	947.02	.515	.662	.244	168.32	144.14	2376.
300.00	29.9550	28.705	877.72	.525	.672	.262	181.66	156.95	2283.
320.00	29.3001	26.704	814.88	.536	.683	.280	195.22	169.95	2195.
340.00	28.6445	24.850	758.06	.546	.693	.297	208.98	183.14	2112.
360.00	27.9893	23.136	706.84	.557	.703	.314	222.95	196.50	2035.
380.00	27.3357	21.552	660.83	.567	.713	.331	237.11	210.03	1964.
400.00	26.6852	20.091	619.67	.577	.722	.348	251.46	223.72	1897.
420.00	26.0394	18.744	582.98	.586	.731	.365	265.99	237.57	1836.
440.00	25.3997	17.504	550.42	.596	.740	.381	280.70	251.56	1780.
460.00	24.7679	16.364	521.68	.605	.748	.398	295.57	265.69	1729.
480.00	24.1455	15.318	496.43	.615	.756	.414	310.61	279.95	1682.
500.00	23.5341	14.357	474.37	.624	.763	.430	325.79	294.34	1641.
520.00	22.9353	13.477	455.23	.633	.770	.446	341.13	308.85	1603.
540.00	22.3504	12.670	438.72	.642	.777	.461	356.60	323.48	1570.
560.00	21.7805	11.931	424.60	.650	.784	.477	372.21	338.22	1540.
580.00	21.2267	11.254	412.64	.659	.790	.492	387.94	353.07	1515.
600.00	20.6898	10.634	402.59	.667	.796	.507	403.81	368.03	1492.
620.00	20.1703	10.066	394.28	.676	.802	.522	419.79	383.09	1473.
640.00	19.6687	9.5448	387.51	.684	.808	.537	435.89	398.25	1457.
660.00	19.1851	9.0667	382.12	.692	.813	.552	452.10	413.52	1443.
680.00	18.7196	8.6275	377.94	.700	.819	.566	468.42	428.88	1432.
700.00	18.2720	8.2235	374.84	.708	.824	.580	484.85	444.34	1422.
720.00	17.8420	7.8514	372.71	.716	.829	.594	501.39	459.90	1415.
740.00	17.4292	7.5082	371.42	.724	.835	.608	518.03	475.56	1409.
760.00	17.0332	7.1911	370.89	.731	.840	.622	534.77	491.31	1405.
780.00	16.6534	6.8978	371.02	.739	.845	.636	551.61	507.16	1403.
800.00	16.2893	6.6258	371.74	.746	.850	.650	568.56	523.12	1401.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

4500.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV - -	CP BTU/LB/DEG F)	S* - -	H* - -	U BTU/LB - -	VEL SND FT/SEC
-40.00	40.5968	102.54	3570.8	.348	.487	-.076	-12.38	-32.89	4813.
-20.00	40.0232	94.828	3308.2	.358	.496	-.053	-2.54	-23.35	4610.
.00	39.4497	87.892	3063.1	.366	.504	-.030	7.47	-13.64	4422.
20.00	38.8750	81.594	2834.8	.374	.512	-.009	17.63	-3.79	4242.
40.00	38.2981	75.834	2622.6	.383	.521	.012	27.96	6.22	4069.
60.00	37.7182	70.538	2425.8	.392	.531	.033	38.47	16.39	3903.
80.00	37.1348	65.647	2243.6	.402	.541	.053	49.19	26.76	3743.
100.00	36.5477	61.119	2075.3	.413	.552	.073	60.12	37.33	3589.
120.00	35.9568	56.919	1919.9	.424	.564	.093	71.28	48.12	3442.
140.00	35.3619	53.019	1776.8	.435	.576	.112	82.67	59.13	3301.
160.00	34.7632	49.394	1645.1	.447	.588	.131	94.31	70.35	3167.
180.00	34.1610	46.025	1524.0	.459	.600	.150	106.18	81.80	3040.
200.00	33.5554	42.892	1412.9	.470	.611	.169	118.29	93.48	2919.
220.00	32.9468	39.980	1311.0	.482	.623	.187	130.64	105.36	2804.
240.00	32.3357	37.274	1217.7	.493	.635	.205	143.22	117.46	2695.
260.00	31.7225	34.760	1132.4	.505	.646	.223	156.02	129.77	2593.
280.00	31.1080	32.427	1054.5	.516	.657	.241	169.04	142.27	2496.
300.00	30.4927	30.261	983.45	.526	.667	.259	182.28	154.97	2404.
320.00	29.8775	28.253	918.86	.537	.677	.276	195.73	167.86	2319.
340.00	29.2631	26.392	860.23	.548	.687	.294	209.38	180.92	2238.
360.00	28.6506	24.669	807.11	.558	.697	.311	223.23	194.16	2163.
380.00	28.0409	23.074	759.11	.568	.707	.328	237.26	207.57	2093.
400.00	27.4351	21.600	715.86	.578	.716	.344	251.49	221.13	2028.
420.00	26.8343	20.238	676.98	.588	.724	.361	265.88	234.85	1967.
440.00	26.2397	18.981	642.15	.597	.733	.377	280.46	248.72	1912.
460.00	25.6523	17.821	611.04	.607	.741	.393	295.20	262.73	1861.
480.00	25.0735	16.751	583.35	.616	.749	.409	310.09	276.88	1814.
500.00	24.5041	15.765	558.80	.625	.757	.425	325.15	291.17	1771.
520.00	23.9453	14.857	537.12	.634	.764	.441	340.35	305.58	1733.
540.00	23.3980	14.020	518.07	.643	.771	.456	355.70	320.11	1698.
560.00	22.8630	13.250	501.39	.652	.778	.472	371.19	334.77	1666.
580.00	22.3412	12.540	486.89	.660	.785	.487	386.82	349.55	1638.
600.00	21.8330	11.886	474.34	.669	.791	.502	402.58	364.44	1613.
620.00	21.3390	11.283	463.57	.677	.797	.517	418.47	379.44	1591.
- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
640.00	20.8595	10.728	454.41	.685	.804	.532	434.48	394.55	1572.
660.00	20.3947	10.215	446.69	.693	.810	.546	450.61	409.78	1555.
680.00	19.9448	9.7406	440.27	.701	.816	.560	466.86	425.11	1541.
700.00	19.5097	9.3025	435.03	.709	.821	.575	483.23	440.55	1529.
720.00	19.0894	8.8969	430.83	.717	.827	.589	499.71	456.09	1518.
740.00	18.6837	8.5210	427.58	.725	.833	.603	516.31	471.74	1510.
760.00	18.2922	8.1722	425.19	.732	.838	.617	533.02	487.49	1502.
780.00	17.9147	7.8480	423.55	.740	.843	.630	549.83	503.35	1497.
800.00	17.5509	7.5464	422.60	.747	.849	.644	566.75	519.31	1493.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

5000.00 PSI ISOBAR

T DEG F	DENSITY LB/FT3	DP/DT PSI/DEG F	DP/DD PSI/(LB/FT3)	CV	CP	S*	H*	U	VEL SND FT/SEC
				- - BTU/LB/DEG F) - -			- - BTU/LB - -		
-40.00	40.7338	105.23	3732.0	.347	.486	-.077	-10.77	-33.49	4923.
-20.00	40.1709	97.244	3460.4	.358	.495	-.054	-.95	-23.99	4715.
.00	39.6092	90.092	3208.0	.366	.503	-.032	9.03	-14.33	4523.
20.00	39.0472	83.625	2973.6	.374	.511	-.011	19.17	-4.52	4341.
40.00	38.4840	77.732	2756.3	.383	.519	.010	29.47	5.43	4166.
60.00	37.9190	72.330	2555.2	.392	.529	.031	39.96	15.55	3999.
80.00	37.3516	67.357	2369.4	.402	.539	.051	50.63	25.86	3839.
100.00	36.7818	62.765	2197.9	.413	.550	.071	61.53	36.37	3685.
120.00	36.2093	58.514	2039.7	.424	.562	.091	72.64	47.09	3539.
140.00	35.6344	54.573	1894.2	.436	.573	.110	83.99	58.02	3399.
160.00	35.0570	50.917	1760.2	.448	.585	.129	95.57	69.18	3267.
180.00	34.4774	47.523	1637.1	.459	.597	.148	107.39	80.55	3141.
200.00	33.8959	44.370	1524.1	.471	.608	.166	119.44	92.14	3021.
220.00	33.3130	41.443	1420.4	.483	.620	.184	131.72	103.95	2908.
240.00	32.7291	38.724	1325.4	.494	.631	.203	144.23	115.96	2801.
260.00	32.1445	36.200	1238.4	.506	.642	.221	156.96	128.18	2701.
280.00	31.5600	33.856	1158.9	.517	.653	.238	169.91	140.59	2606.
300.00	30.9762	31.682	1086.2	.528	.663	.256	183.06	153.19	2516.
320.00	30.3936	29.665	1020.0	.538	.673	.273	196.43	165.98	2432.
340.00	29.8130	27.795	959.60	.549	.683	.290	209.99	178.95	2353.
360.00	29.2352	26.062	904.72	.559	.692	.307	223.74	192.09	2279.
380.00	28.6610	24.456	854.90	.569	.702	.324	237.68	205.39	2211.
400.00	28.0912	22.969	809.76	.579	.711	.341	251.80	218.86	2146.
420.00	27.5267	21.593	768.94	.589	.719	.357	266.10	232.48	2087.
440.00	26.9682	20.320	732.10	.599	.728	.373	280.57	246.26	2032.
460.00	26.4167	19.142	698.93	.608	.736	.390	295.20	260.18	1981.
480.00	25.8730	18.053	669.14	.617	.744	.405	310.00	274.24	1934.
500.00	25.3378	17.046	642.44	.626	.751	.421	324.95	288.43	1891.
520.00	24.8119	16.115	618.59	.635	.759	.437	340.06	302.76	1851.
540.00	24.2960	15.254	597.35	.644	.766	.452	355.31	317.23	1815.
560.00	23.7906	14.458	578.48	.653	.773	.467	370.71	331.81	1783.
580.00	23.2964	13.722	561.79	.661	.780	.483	386.24	346.52	1753.
600.00	22.8138	13.041	547.08	.670	.787	.497	401.91	361.36	1727.
620.00	22.3430	12.410	534.17	.678	.794	.512	417.72	376.31	1703.
640.00	21.8846	11.826	522.91	.686	.800	.527	433.66	391.38	1681.
660.00	21.4385	11.284	513.14	.694	.806	.541	449.72	406.56	1662.
680.00	21.0050	10.782	504.73	.702	.813	.556	465.91	421.86	1646.
700.00	20.5840	10.316	497.55	.710	.819	.570	482.22	437.27	1631.
720.00	20.1756	9.8825	491.49	.718	.825	.584	498.65	452.79	1618.
740.00	19.7797	9.4793	486.44	.726	.830	.598	515.20	468.42	1607.
760.00	19.3961	9.1037	482.31	.733	.836	.612	531.87	484.16	1597.
780.00	19.0246	8.7535	479.01	.740	.842	.625	548.65	500.01	1589.
800.00	18.6650	8.4265	476.43	.748	.847	.639	565.54	515.97	1583.

H* = H(T) - H(N.B.T,LIQUID) AND
S* = S(T) - S(N.B.T,LIQUID)

Thermodynamic Properties of Isobutane - Computer Program

by

Meyer Waxman, Max Klein, John Gallagher and J.M.H. Levelt Sengers

November 10, 1980

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THIS IS A MAIN PROGRAM FOR GENERATING TABLES FOR ISOBUTANE. THE USER
 IS QUERIED FOR OPTIONS AND UNITS DESIRED.
      IMPLICIT DOUBLE PRECISION(A-H,O-Z)
      COMMON /QQQQ/ Q0,Q1,QB,Q3,Q4,Q5,QHB,QUB,QCP,DPDTP,ELEM
      COMMON/DERIVS/ DADT,D2A,DPDTR,D2P
      COMMON/ELLCON/G1,G2,GF,B1,B2,B1T,B2T,B1TT,B2TT,GAM
      COMMON /NCONST/ G(40),MM(40),NK(40),NC
      COMMON /ACONST/ TR,PC,GASCON,TC,AA,WTMOL,SZZ,RHOC,RR,ATMBAR
     1,XMLIT,PTR,UIN,DPDDB
      COMMON /UNITS/ IT,ID,IP,IH,NT,ND,NP,NH,FT,FD,FP,FH
      CALL CONSTS
      NS=2H M
      IF(ID.EQ.4) NS=2HFT
   15 WRITE(6,11)
      READ(5,1,END=9) IOPT
   20 WRITE(6,4) IOPT
      WRITE(6,1002)
      READ(5,1,END=9) XISO
      WRITE(6,1) IOPT,XISO
      IF(IOPT.EQ.0) GO TO 9
      GO TO (101,201,301),IOPT
  101 WRITE(6,102)
      READ(5,1,END=9) JOPT
      IF(JOPT-1) 15,501,104
  104  WRITE(6,1003)
      READ(5,1,END=9) Y1,Y2,YI
      IF(YI.GT.Y2) WRITE(6,2)
      WRITE(6,4) JOPT
      IF(YI.EQ.0.) GO TO 502
  103 TT=XISO
      T=TTT(TT)
      IF(JOPT.EQ.2) D=0.
      CALL BB(T)
      WRITE(6,444) NT,NP,ND,NP,NT,NP,ND,NH,NT,NH,NS
      IF(T.GT.TC) GO TO 2012
      X=PS(T)
      DGSS=GESLIQ(T)*1.1
      CALL DFIND(DLIQ,X,DGSS,T,DQ)
      DGSS=GESVAP(T)*.9
      CALL DFIND(DVAP,X,DGSS,T,DQ)
      ITWO=0
 2012 CALL FZ(T,GZ,HZ,SZ,CPZ)
      IF(JOPT.EQ.2) PRES=Y1-YI
      IF(JOPT.NE.3) GO TO 17
      DD=Y1-YI
   17 IZ=0
      IF(T.LT.260. .AND. T.GE.250.) WRITE(6,6)
      IF(T.GT.580. .AND. T.LT.591.) WRITE(6,7)
      IF(IOPT.GE.2) GO TO 24
   22 IF(JOPT.EQ.2) PRES=PRES+YI
      IF(JOPT.EQ.3) DD=DD+YI
      IF(JOPT.EQ.2 .AND. PRES.GT.Y2) GO TO 101
      IF(JOPT.EQ.3 .AND. DD.GT.Y2) GO TO 101
   24 CONTINUE
      IF(JOPT.EQ.3) D=DD*FD
```

```
      CALL BB(T)
      CALL FZ(T,GZ,HZ,SZ,CPZ)
      PSAT=20000.
      IF(JOPT.EQ.3) GO TO 1023
      IF(T.LT.TC) PSAT=PS(T)
      IF(T.LT.TC .AND. PRES.GT.PSAT) IZ=3
      IF(T.GT.TC) IZ=2
      DGSS=D
      IF(DGSS.GT.0. .AND. IZ.EQ.3) DGSS=GESLIQ(T)*1.1
      IF(DGSS.GT.0. .AND. IZ.EQ.0) DGSS=GESVAP(T)*.9
      IF(DGSS.GT.0. .AND. IZ.EQ.2) DGSS=RHOC*PRES/PC*TC/T*.1
      IF(PRES.LT.(PC*.05).AND.PRES.LT.PSAT) DGSS=PRES/GASCON/T
      IF(IOPT.EQ.1 .AND. JOPT.EQ.2 .AND. PRES.GT.PSAT .AND.
     1 D.LT..227) GO TO 261
 1023 YY=B1*DGSS/4.
      IF(YY.LT.1.) GO TO 23
      DGSS=DGSS/4.
      GO TO 1023
   23 CALL FZ(T,GZ,HZ,SZ,CPZ)
      IF(IOPT.EQ.3 .OR. JOPT.EQ.3)  GO TO 29
      CALL DFIND(D,PRES,DGSS,T,DQ)
   29 CALL QQ(T,D)
      IF(T.GT.TC) GO TO 30
      IF(IOPT.EQ.2) GO TO 30
      IF(D.GT.DLIQ) GO TO 30
      IF(D.LT.DVAP) GO TO 30
      IF(ITWO.GT.0) GO TO 22
      ITWO=1
      WRITE(6,12) DVAP,DLIQ,D
      GO TO 22
   30 CALL QQ(T,D)
      IF(T.LT.400.) GO TO 35
      IF(T.GT.415.) GO TO 35
      IF(D.GT..18 .AND. D.LT..28) WRITE(6,8)
   35 UZ=HZ-1.
      CVZ=CPZ-1.
      AZ=UZ-SZ
      UZZ1=WTMOL*UIN/RR/T
      PDUM=PBASE(D,T)+Q0
      IF(IOPT.EQ.3 .OR. JOPT.EQ.3)  DQ=GASCON*T*DPDDB + Q5
      IF(JOPT.GE.3 .OR. (JOPT.EQ.1 .AND. IOPT.EQ.3)) PRES=PDUM
      ZZ=PRES/D/T/GASCON
      GRT=QB+Q1/T/GASCON+AZ+DLOG(D*T*1.43045/ATMBAR)+ZZ-UZZ1
      URT=QUB+Q1/GASCON/T-DADT/GASCON+UZ-UZZ1
      DPDT=DPDTB+DPDTR
      CVR=CVZ+QCB+D2A/GASCON
      U=URT*RR*FH*T/WTMOL
      CPR=CVR+T*(DPDT)**2/D/D/DQ/GASCON
      C=DSQRT(DABS(CPR*DQ*1.D2/FP/CVR))
      IF(ID.EQ.4) C=C*3.2825
      HRT=URT+ZZ
      H=(HRT*T)*RR*FH/WTMOL
      SR=HRT-GRT-SZZ
      S=SR*RR*FH*FT/WTMOL
      ART=GRT-ZZ
```

```
      COMP = 1.D3/D/DQ
      DDDTL=1.D3*DPDT/D/DQ
      CP=CPR*RR*FH/WTMOL*FT
      CV=CVR*RR*FH/WTMOL*FT
      DPDT=DPDT*FT
      DPDD=DQ*FD
      D1=D/FD
      IF(ID.NE.2)WRITE(6,21) TT,PRES,D1,DPDT,DPDD,CV,CP,S,H,U,C
      IF(ID.EQ.2)WRITE(6,2101) TT,PRES,D1,DPDT,DPDD,CV,CP,S,H,U,C
      GO TO (22,204,304),IOPT
  201 JOPT=1
      PRES = XISO
  202 WRITE(6,203)
      READ(5,1,END=9) T1,T2,YI
      IF(YI.EQ.0.) GO TO 15
      ITWO=0
      IF(YI.GT.T2) WRITE(6,2)
      TT=T1-YI
      TT1=TTT(T1)
      WRITE(6,444) NT,NP,ND,NP,NT,NP,ND,NH,NT,NH,NS
      X=PS(TT1)
      X1=X*1.00001
      X2=X/1.00001
      CALL BB(TT1)
      DGSS=GESLIQ(TT1)*1.1
      CALL DFIND(DLIQ,X1,DGSS,TT1,DQ)
      DGSS=GESVAP(TT1)*.8
      CALL DFIND(DVAP,X2,DGSS,TT1,DQ)
      IF(PRES.GT.X) DGSS=DLIQ
  204 TT=TT+YI
      T=TTT(TT)
      IF(TT.GT.T2) GO TO 202
      CALL BB(T)
      IF(TT.GT.T1) DGSS=D-D*YI*DDDTL*.001
      CALL FZ(T,GZ,HZ,SZ,CPZ)
      IF(T.GT.TC) GO TO 17
      X=PS(T)
      IF(PRES.LT.X .AND. D.GT.RHOC) GO TO 206
      GO TO 23
  206 CALL TCORR(TS,XISO,DLIQ,DVAP)
      CALL SPROPS(TS,XISO,DLIQ,DVAP)
      DGSS=DVAP
      CALL BB(T)
      CALL FZ(T,GZ,HZ,SZ,CPZ)
      GO TO 23
  261 CALL PCORR(T,PSAT,DLIQ,DVAP)
      CALL SPROPS(T,PSAT,DVAP,DLIQ)
      DGSS=DLIQ
      GO TO 1023
  301 JOPT=1
      D=XISO*FD
  302 WRITE(6,203)
      READ(5,1,END=9) T1,T2,YI
      IF(YI.EQ.0.) GO TO 15
      ITWO=0
```

```
      IF(YI.GT.T2) WRITE(6,2)
      IF(YI.EQ.0.) GO TO 502
      IF(T1.LE.0.) GO TO 15
      TT=T1-YI
      WRITE(6,444) NT,NP,ND,NP,NT,NP,ND,NH,NT,NH,NS
  304 TT=TT+YI
      T=TTT(TT)
      CALL BB(T)
      IF(T.GT.T2) GO TO 302
      IF(T.GE.TC) GO TO 17
      X=PS(T)
      DGSS=GESLIQ(T)*1.1
      CALL DFIND(DLIQ,X,DGSS,T,DQ)
      DGSS=GESVAP(T)*.9
      CALL DFIND(DVAP,X,DGSS,T,DQ)
      IF(D.GT.DLIQ) GO TO 306
      IF(D.LT.DVAP) GO TO 306
      IF(ITWO.GT.0) GO TO  304
      ITWO=1
      WRITE(6,12) DVAP,DLIQ,D
      GO TO  304
  306 IF(IVAP.GE.0)WRITE(6,442)T,X,Y
      GO TO 17
  501 WRITE(6,1001)
      GO TO 15
  502 WRITE(6,1005)
      GO TO 15
    9       STOP
    1  FORMAT()
    2  FORMAT('0 **********'/' INCREMENT  LARGER THAN FINAL VALUE. CHECK
     1 INPUT'/' ********')
    4  FORMAT(' OPTION = ',I5)
    6  FORMAT (' CARE SHOULD BE TAKEN FOR T < 260. K')
    7  FORMAT(' CARE SHOULD BE TAKEN FOR T > 580.')
    8  FORMAT(' CAUTION *** CRITICAL REGION***')
   11  FORMAT( ' DO YOU WISH TO CALCULATE '/' AN ISOTHERM (ENTER 1)'/' AN
     1 ISOBAR (ENTER 2) '/' AN ISOCHORE (ENTER 3)'
     2   /'(ENTER 0 TO DISCONTINUE)'     )
   12  FORMAT('  ------TWO PHASE REGION----------------------------------
     1 SAT VALUES ARE'/12X,' V = ',D15.6,'  LIQ = ',D15.6,' D = ',D15.6)
   21  FORMAT(F8.2,F11.3,F11.3,F10.4,F10.5,3F11.4,F11.2,F12.2,F10.2,F9.4)
 2101  FORMAT(F8.2,F11.3,F11.6,F10.4,F10.2,3F11.4,F11.2,F12.2,F10.2,F9.4)
  102 FORMAT(' ENTER INTEGER FOR INDEPENDENT VARIABLE '
     1/' 2 FOR PRESSURE, 3 FOR DENSITY')
  203 FORMAT(//' IF YOU WISH TO CHOOSE A NEW CONSTANT PARAMETER,  TYPE
     1 0 0 0'/' OTHERWISE ENTER FIRST LAST AND INCREMENT OF T')
  442 FORMAT(' FOR T = ',F8.3,5X,'VAPOR PRESSURE = ',G12.5,5X,' BAR '
     1,'HEAT OF VAPORIZATION =  ',G12.5)
  444 FORMAT(129X1H./5X,1HT,6X,8HPRESSURE,3X,7HDENSITY,4X,5HDP/DT,4X
     A,7H DP/DD ,8X,2HCV,9X,2HCP,10X,1HS,10X,1HH
     1,10X,1HU,5X,7HVEL SND/3X,4HDEG ,A1,6X,A3,7X,A6,2X,A3
     2,5H/DEG ,A1,1X,A3,2H/(,A6,1H),5X,4H- - ,A6,5H/DEG ,A1,5H) - -
     3,11X,4H- - ,A6,4H - - ,5X,A2,4H/SEC/129X,1H./129X,1H.)
 1001 FORMAT('0TEMPERATURE REQUESTED FOR BOTH VARIABLES')
 1002 FORMAT(' READ IN CONSTANT VALUE')
 1003 FORMAT(' READ IN INITIAL,FINAL,INCREMENT VALUES')
 1005 FORMAT(' ZERO INCREMENT TRY AGAIN')
      END
```

```
      SUBROUTINE CONSTS
C THIS SUBROUTINE SETS UP THE NECESSARY PARAMETERS AND COEFFICIENTS TO
C  DEFINE THE SURFACE.  IT ALSO CALLS "UNIT" TO QUERY THE USER AS TO THE
C  SYSTEM OF UNITS DESIRED.
      IMPLICIT DOUBLE PRECISION(A-H,O-Z)
      COMMON /QQQQ/ Q0,Q1,QE,Q3,Q4,Q5,QHB,QUB,QCB,DPDTB,ELEM
      COMMON/DERIVS/ DADT,D2A,DPDTR,D2P
      COMMON/ELLCON/G1,G2,GF,B1,B2,B1T,B2T,B1TT,B2TT,GAM
      COMMON /NCONST/ G(40),MM(40),NK(40),NC
      COMMON /BCONST/ P(13),Q(13),NVIR,NVOL
      COMMON /ACONST/ TR,PC,GASCON,TC,AA,WTMOL,SZZ,RHOC,RR,ATMBAR
     1,XMLIT,PTR,UIN
      COMMON /UNITS/ IT,ID,IP,IH,NT,ND,NP,NH,FT,FD,FP,FH
      DIMENSION GG(25),ITERM(40)
      DATA GG/-.53246071D4 ,.23204671D5 , -.17401516D6 ,.90385098D6
     1,-.92932593D6 ,  .35221357D6 , -.68516947D4 , -.38467059D5
     2,-.95641444D6 ,  .10313307D7 ,  .91932670D6 , -.10556030D7
     3, .32185897D5, -.41542109D5,  .32056333D6, -.73811083D6
     4, .65094594D6, -.12701127D5, -.28111644D5, -.56311523D4
     5, .25040493D5,-.55741981D5,.63558419D5,-.44397019D3,.92746645D2/
      DATA ITERM/11,21,41,51,61,81,12,32,52,62,72,82,13,23,43,63
     1,83,14,64,15,25,55,85,26,86,15*0/
      DATA P/.158657D3,-.403853D2,3*0.D0,-.259775D0,3*0.D0,.101845D-2
     1,3*0.D0/,Q/.213454D3,0.D0,-.437486D3,0.D0,-.103589D3,0.D0
     2,.948542D1,4*0.D0,-.640067D-2,0.D0/
      CALL UNIT
      TC=407.851D0
      RR=8.31440D0
      ATMBAR=1.01325
      WTMOL=58.1243
      GASCON=10.*RR*FP/WTMOL
C  RHOC IN G/CM3
      RHOC = .2270335D0
C  PC=36.306 BARS * CONVERSION FACTOR TO DESIRED UNITS
      PC=36.30576D0*FP
      UIN=-119.035658D0
      SZZ = 24.23464D0
      NVIR=12
      NVOL=12
      GAM=3.
      NC=25
  DO 7 I=1,NC
   7  G(I)=GG(I)*FP
      DO 10 J=1,NC
      MM(J)=ITERM(J)/10
      NK(J)=MOD(ITERM(J),10)+1
      IF(ITERM(J).NE.0) GO TO 10
      WRITE(6,1000) J,NC
      STOP
   10 CONTINUE
 1000 FORMAT(' ZERO PAIR OF EXPONENTS FOR TERM',
     1215,' TERMS EXPECTED')
      AA=100./WTMOL
C THE G1,G2 AND GF CALCULATED ARE GEOMETRIC CONSTANTS USED IN CALCULATING
C  THE BASE FUNCTION.  GAM IS A NON-SPHERICAL FACTOR, AND FOR A SPHERICAL
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C  MOLECULE GAM=3. AND THEREFORE G1=G2=GF=1.
      G1=GAM-2.
      G2=1.-GAM+GAM*GAM/3.
      GF=.25*(1.+GAM)
      RETURN
      END
CC
      SUBROUTINE UNIT
C THIS SUBROUTINE QUERIES THE USER AS TO HIS CHOICE OF UNITS AND SETS
C  INTERNAL PARAMETERS APPROPRIATELY.  THE INTERNAL UNITS OF THE PROGRAM A
C  TEMPERATURES IN K, DENSITIES IN G/CM3, ALL OTHER QUANTITIES CALCULATED
C  IN DIMENSIONLESS UNITS AND DIMENSIONED AT OUTPUT TIME.
      IMPLICIT DOUBLE PRECISION (A-H,O-Z)
      COMMON /UNITS/ IT,ID,IP,IH,NT,ND,NP,NH,FT,FD,FP,FH
      DIMENSION FFD(4),FFP(4),FFH(6),NNT(4),NND(4),NNP(4),NNH(6)
      DATA FFD/1.D-3,1.D0,.0581243D0,.016018D0/
      DATA FFP/.1D0,1.D0,.9869232667D0,14.5038D0/
      DATA FFH/2*1.D0,58.1243D0,.23884590D0,13.882751D0,.4299226D0/
      DATA NNT/1HK,1HC,1HR,1HF/
      DATA NND/6HKG/M3 ,6HG/CM3 ,6HMOL/L ,6HLB/FT3/
      DATA NNP/3HMPA,3HBAR,3HATM,3HPSI/
      DATA NNH/6HKJ/KG ,6H J/G  ,6HJ/MOL ,6HCAL/G ,6HCAL/M ,6HBTU/LB/
      DATA A1,A2,A3,A4,A5,A6,A7,A8/6HTEMPER,6HATURE ,6HDENSIT,
     16HY     ,6HPRESSU,6HRE    ,6HENERGY,6H     /
      WRITE(6,11) A1,A2
      WRITE(6,12)
      READ(5,10) IT
      NT=NNT(IT)
      WRITE(6,11) A3,A4
      WRITE(6,13)
      READ(5,10) ID
      ND=NND(ID)
      FD=FFD(ID)
      WRITE(6,11) A5,A6
      WRITE(6,14)
      READ(5,10) IP
      NP=NNP(IP)
      FP=FFP(IP)
      WRITE(6,11) A7,A8
      WRITE(6,15)
      READ(5,10) IH
      NH=NNH(IH)
      FH=FFH(IH)
      RETURN
   10 FORMAT()
   11 FORMAT(' ENTER UNITS CHOSEN FOR ',2A6)
   12 FORMAT(' CHOOSE FROM 1=DEG K, 2=DEG C, 3=DEG R, 4=DEG F').
   13 FORMAT(' CHOOSE FROM 1=KG/M3, 2=G/CM3, 3=MOL/L, 4=LB/FT3')
   14 FORMAT(' CHOOSE FROM 1=MPA, 2=BAR, 3=ATM, 4=PSIA')
   15 FORMAT(' CHOOSE FROM 1=KJ/KG, 2=J/G, 3=J/MOL, 4=CALORIES/G, 5=CALC
     1RIES/MOL, 6=BTU/LB')
      END
CC
      FUNCTION TTT(T)
C FUNCTION TO CONVERT INPUT TEMPERATURES IN EXTERNAL UNITS TO DEG K
```

```
      DOUBLE PRECISION T,TTT,FT,FD,FP,FH
      COMMON /UNITS/ IT,ID,IP,IH,NT,ND,NP,NH,FT,FD,FP,FH
      GO TO (1,2,3,4),IT
   1  TTT=T
      FT=1.
      RETURN
   2  TTT=T+273.15D0
      FT=1.
      RETURN
   3  TTT=T/1.8D0
      FT=.555555555556D0
      RETURN
   4  TTT=(T+459.67D0)/1.8D0
      FT=.555555555556D0
      RETURN
      END
CC
      FUNCTION TTI(T)
C FUNCTION TO CONVERT INTERNAL TEMPERATURES IN DEG K TO EXTERNAL UNITS
      DOUBLE PRECISION T,TTI,FT,FD,FP,FH
      COMMON /UNITS/ IT,ID,IP,IH,NT,ND,NP,NH,FT,FD,FP,FH
      GO TO (5,6,7,8),IT
   5  TTI=T
      RETURN
   6  TTI=T-273.15D0
      RETURN
   7  TTI=T*1.8D0
      RETURN
   8  TTI=T*1.8D0-459.67D0
      RETURN
      END
CC
      SUBROUTINE CORR(T,P,DL,DV,DELG)
C SUBROUTINE CORR WILL CALCULATE, FOR AN INPUT T AND P AT OR NEAR THE
C  VAPOR PRESSURE, THE CORRESPONDING LIQUID AND VAPOR DENSITIES AND ALSO
C  DELG = (GL-GV)/RT FOR USE IN CALCULATING THE CORRECTION TO THE VAPOR
C  PRESSURE FOR DELG = 0.
      IMPLICIT DOUBLE PRECISION(A-H,O-Z)
      COMMON /QQQQ/ Q00,Q01,Q02,Q10,Q20,Q11,Q7,Q8,Q9,Q010
      COMMON /ACONST/ TR,PC,GASCON,TC,AA,WTMOL,RHOTR,RHOC,RR,ATMBAR
     1,XMLIT,PTR,UIN
      DLIQ=DL
      IF(DL.LE.0.) DLIQ=GESLIQ(T)*1.04
      IF(DL.LE.0. .AND. T.LT.320.) DLIQ=.7
      CALL BB(T)
      RT=GASCON*T
      CALL DFIND(DL,P,DLIQ,T,DQ)
      QQ2=Q02
      QQ1=Q01/RT+DLOG(DL)
      GL=Q02+(Q01+P/DL)/RT
      DVAP=DV
      IF(DV.LE.0.) DVAP=GESVAP(T)*.96
      CALL DFIND(DV,P,DVAP,T,DQ)
      IF(DV.LT.5.D-7) DV=5.D-7
      GV=Q02+(Q01+P/DV)/RT
```

```
      DELG=GL-GV+DLOG(DL/DV)
      RETURN
      END
CC
      SUBROUTINE PCORR(T,P,DL,DV)
C SUBROUTINE PCORR WILL CALCULATE THE VAPOR PRESSURE P AND THE LIQ AND
C  VAPOR DENSITIES CORRESPONDING TO THE INPUT T, CORRECTED SUCH THAT
C  GL-GV=0.  THE FUNCTION PS IS REQUIRED WHICH WILL GIVE A REASONABLY
C  GOOD APPROXIMATION TO THE VAPOR PRESSURE TO BE USED AS THE STARTING
C  POINT FOR THE ITERATION.
      IMPLICIT DOUBLE PRECISION (A-H,O-Z)
      COMMON /ACONST/ TR,PC,GASCON,TC,AA,WTMOL,RHOTR,RHOC,RR,ATMBAR
     1,XMLIT,PTR,UIN
      P = PS(T)
    2 CALL CORR(T,P,DL,DV,DELG)
      DP=DELG*GASCON*T/(1./DV-1./DL)
      P = P+DP
      IF(DABS(DELG).LT.1.D-4) RETURN
      GOTO 2
      END
CC
      SUBROUTINE TCORR(T,P,DL,DV)
C SUBROUTINE TCORR IS SIMILAR TO "PCORR" EXCEPT THAT THE TEMPERATURE
C  CORRESPONDING TO THE INPUT VAPOR PRESSURE IS FOUND. FUNCTIONS CALLED
C  ARE TSAT AND TDPSDT WHICH GIVE AN APPROXIMATION TO T(SAT) AS FCT OF P
C  T*DP(SAT)/DT.
      IMPLICIT DOUBLE PRECISION (A-H,O-Z)
      COMMON /ACONST/ TR,PC,GASCON,TC,AA,WTMOL,RHOTR,RHOC,RR,ATMBAR
     1,XMLIT,PTR,UIN
      T = TSAT(P)
    2 CALL CORR(T,P,DL,DV,DELG)
      DP=DELG*GASCON*T/(1./DV-1./DL)
      T = T*(1.-DP/TDPSDT(T))
      IF(DABS(DELG).LT.1.D-4) RETURN
      GO TO 2
      END
CC
      FUNCTION PS(T)
C THIS FUNCTION SUPPLIES THE NECESSARY REASONABLY GOOD GUESS FOR VAPOR
C  PRESSURE AS A FCT OF T REQUIRED BY THE PCORR SUBROUTINE AND OTHERS.
      IMPLICIT DOUBLE PRECISION (A-H,O-Z)
      COMMON /ACONST/ TR,PC,GASCON,TC,AA,WTMOL,RHOTR,RHOC,RR,ATMBAR
     1,XMLIT,PTR,UIN
      PS=0.
      IF(T.GE.TC) RETURN
  100 Y=1.-T/TC
      A1=-6.83796
      A2=1.25220
      A5=-2.3406
      N1=(1+1)/2
      XN2=1.5
      N5=(1+5)/2
      X=TC/T*(A1*Y**N1+A2*Y**XN2+A5*Y**N5)
      PRED=DEXP(X)
      PS = PC*PRED
      END
```

```
CC
      FUNCTION TSAT(P)
      IMPLICIT DOUBLE PRECISION(A-H,O-Z)
      COMMON /UNITS/ IT,ID,IP,IH,NT,ND,NP,NH,FT,FD,FP,FH
      COMMON /ACONST/ TR,PC,GASCON,TC,AA,WTMOL,RHOTR,RHOC,GASBAR,ATMBAR
     1,XMLIT,PTR,UIN
      TSAT=0.
      IF(P.GT.PC) RETURN
      K=0
      PL = DLOG(P/FP)
    1 IF(TG.LT.TR) TG=TR
      TG=261.082+25.4673*PL+2.77993*PL**2+.369027*PL**3+.0156168*PL**4
    5 IF(TG.LE.TC) GO TO 6
      WRITE (6,1000) P,TG
 1000 FORMAT (' IN TSAT TG.GE.TCP,TG',2D15.6)
      TSAT=TC-1.
    6 IF(K.LT.8) GO TO 2
      WRITE(6,3) K,P,PP,TG,DP
    3 FORMAT(' K PIN P(TG) TG TDPDT',I5,4D12.5)
      GO TO 8
    2 K=K+1
      PP=PS(TG)
      DP=TDPSDT(TG)
      IF(DABS(1.-PP/P).LT..00001) GO TO 8
      TG=TG+(P-PP)*TG/DP*.75D0
      GO TO 5
    8 TSAT=TG
      RETURN
      END
CC
      FUNCTION TDPSDT(T)
      IMPLICIT DOUBLE PRECISION (A-H,O-Z)
      COMMON /ACONST/ TR,PC,GASCON,TC,AA,WTMOL,RHOTR,RHOC,GASBAR,ATMBAR
     1,XMLIT,PTR,UIN
      Y=1.-T/TC
      IF (Y.GT.0.) GO TO 5
      WRITE (6,1000) T
      STOP
 1000 FORMAT (' T.GE.TC IN TDPSDT',D15.6)
    5 A1=-6.83796
      A2=1.25220
      A5=-2.3406
      XN2=1.5
      X=TC/T*(A1*Y+A2*Y**XN2+A5*Y**3)
      PRED=DEXP(X)*PC
      TDPSDT=-PRED*(A1+1.5*A2*Y**.5+3.*A5*Y**2+X)
      RETURN
      END
CC
      SUBROUTINE FZ(TT,GZ,HZ,SZ,CPZ)
C   THIS SUBROUTINE CALCULATES THE THERMODYNAMIC PROPERTIES FOR
C    ISOBUTANE IN THE IDEAL GAS STATE
      IMPLICIT DOUBLE PRECISION (A-H,O-Z)
      DIMENSION C(9)
C     THE UNITS FOR C ARE FROM CHEN ET AL CAL/MOLE/DEG/
```

```
      DATA C/.113634D8,-.460434D6,.62252D04,-.298782D02
     1,.142485D0,-.661030D-04,.115812D-07,-.20E957D02,.3250D04/
      RCAL=1.9869
      U=C(9)/TT
      Y=DEXP(U)
      X=U**2*Y/(Y-1.)**2*C(8)
      Z=C(8)/(Y-1.)
      Z1=C(8)*(U/(Y-1.)-DLOG(Y-1.)+U)
      CPZ=0.
      GZ=0.
      HZ=0.
      SZ=0.
      DO 8 I=1,7
      CPZ=CPZ+C(I)*TT**(I-4)
      IF(I.NE.3) GO TO 6
       XX=C(I)*DLOG(TT)
      HZ=HZ+XX
      GO TO 7
    6 HZ=HZ+C(I)*TT**(I-3)/(I-3)
      IF(I.NE.4) GO TO 7
      XX=C(I)*DLOG(TT)
      SZ=SZ+XX
      GO TO 8
    7 SZ=SZ+C(I)*TT**(I-4)/(I-4)
    8 CONTINUE
      CPZ=CPZ+X
      HZ=HZ+Z*C(9)-29526.2
      SZ=SZ+Z1+219.62
      GZ=HZ-SZ*TT
      CPZ=CPZ/RCAL
      DIM=RCAL*TT
      SZ=SZ/RCAL
      HZ=HZ/DIM
      GZ=GZ/DIM
      RETURN
      END
CC
      SUBROUTINE BB(T)
C THIS SUBROUTINE CALCULATES THE "B1" AND "B2" USED IN THE BASE FUNCTION
C  AND ALSO THEIR FIRST AND SECOND DERIVATIVES WITH RESPECT TO T.
      IMPLICIT DOUBLE PRECISION (A-H,O-Z)
      COMMON /ELLCON/ G1,G2,GF,B1,B2,B1T,B2T,B1TT,B2TT,GAM
      COMMON /ACONST/ TR,PC,GASCON,TC,A,WTMOL,RHOTR,RHOC,GASBAR,ATMBAR
     1,XMLIT,PTR,UIN
      COMMON /BCONST/ P(13),Q(13),NVIR,NVOL
      DIMENSION V(13)
      V(1)=1.
      NMAX=NVOL
      IF(NVIR.GT.NVOL) NMAX=NVIR
      IF(NMAX.LE.13) GO TO 1
     2WRITE(6,1000) NMAX,NVIR,NVOL
      STOP
    1 DO 2 I=2,NMAX
    2  V(I)=V(I-1)*TC/T
      BB1=P(1)+P(2)*DLOG(1./V(2))
```

```
      BB2=Q(1)
      BB1T=P(2)*V(2)/TC
      BB2T=0.
      BB1TT=0.
      BB2TT=0.
      DO 4 I=3,NMAX
      BB1=BB1+P(I)*V(I-1)
      BB2=BB2+Q(I)*V(I-1)
      BB1T=BB1T-(I-2)*P(I)*V(I-1)/T
      BB2T=BB2T-(I-2)*Q(I)*V(I-1)/T
      BB1TT=BB1TT+P(I)*(I-2)**2*V(I-1)/T/T
    4 BB2TT=BB2TT+Q(I)*(I-2)**2*V(I-1)/T/T
      BB1TT=BB1TT-BB1T/T
      BB2TT=BB2TT-BB2T/T
C     TO CHANGE FROM CC/MOLE READ IN TO CC/GRAM
      B1=BB1/WTMOL
      B2=BB2/WTMOL
      B1T=BB1T/WTMOL
      B2T=BB2T/WTMOL
      B1TT=BB1TT/WTMOL
      B2TT=BB2TT/WTMOL
      RETURN
 1000 FORMAT(' TOO MANY VIRIAL OR SPHERE TERMS NMAX,NVIR,NVOL',3I5)
      END
CC
      FUNCTION PBASE(D,T)
C FUNCTION PBASE CALCULATES THE "BASE FUNCTION" CONTRIBUTIONS TO THE
C  PRESSURE ("PBASE"), HELMHOLTZ FCT ("QBASE"), INTERNAL ENERGY ("QUB"),
C  ENTHALPY ("QHB"), DZ/DRHO ("DZDDB"), DP/DT ("DPDTB"), AND CV ("QCVB").
C QBASE, QHB, QUB, QCVB ARE RETURNED IN DIMENSIONLESS FORM (/R OR /RT)
C  AND PBASE IN REQUESTED PRESSURE UNITS, DP/DT IN REQUESTED PRESSURE
C  UNITS/K.
      IMPLICIT DOUBLE PRECISION (A-H,O-Z)
      COMMON /QQQQ/ Q0,Q1,QBASE,Q3,Q4,Q5,QHB,QUB,QCVB,DPDTB
      COMMON/ELLCON/ G1,G2,GF,B1,B2,B1T,B2T,B1TT,B2TT,GAM
      COMMON /ACONST/ TR,PC,GASCON,TC,A,WTMOL,SSZ,RHOC,RR,ATMBAR
     1,XMLIT,PTR,UIN,DZDDB
      Y=.25*B1*D
      Z0=(1.+G1*Y+G2*Y*Y)/(1.-Y)**3
      YY=G2*Y*Y
      Z1=4.*Y*(B2/B1-GF)
      Z=Z0+Z1
      X=1.-Y
      DZ0=(G1+2.*G2*Y)/X**3 + 3.*(1.+G1*Y+G2*Y*Y)/X**4
      DZ=DZ0+4.*(B2/B1-GF)
      QBASE=-DLOG(X)-(G2-1.)/X+(G1+G2+1.)/X/X/2.+4.*Y*(B2/B1-GF)
     1  -(G1-G2+3.)/2.
      PBASE=GASCON*T*D*Z
      DZDDB = Z+Y*DZ
C     WRITE(6,666) D,B1,Y,Z,DZ,DZDDB
  666 FORMAT(' D,B1,Y,Z,DZ,DZDDB:',6F12.5)
      BB2=B2
      BB2T=B2T
      BB2TT=T*T*B2TT
      QUB= -T*B1T*(Z-1.-D*BB2)/B1-D*T*BB2T
```

```
      QHB=Z+QUB
      QCVB=2.*QUB+(Z0-1.)*((T*B1T/B1)**2-T*T*B1TT/B1)
     1 - D*(BB2TT - GF*B1TT*T*T) -(T*B1T/B1)**2*Y*DZ0
      DPDTE=PBASE/T + PBASE*D/Z*(DZ*B1T/4.+B2T-B2/B1*B1T)
      RETURN
      END
CC
      SUBROUTINE QQ(T,D)
C "QQ" CALCULATES THE "RESIDUAL" CONTRIBUTION TO THE PRESSURE "Q",
C  HELMHOLTZ FCT "QZ", DP/DRHO "C11", DA/DT "DADT", D2A/DT2 "D2A",
C  DP/DT "DPDT". THESE QUANTITIES ARE ALL RETURNED IN COMMON.
      IMPLICIT DOUBLE PRECISION (A-H,O-Z)
      COMMON /CQQQ/ Q,QZ,Q02,Q10,Q20,Q11,Q7,Q8,Q9,Q010,ELEM
      COMMON /NCONST/ A(40),II(40),JJ(40),N
      COMMON /ACONST/ TR,PC,GASCON,TC,AA,WTMOL,SZZ,RHOC,RR,ATMBAR
     1,XMLIT,PTR,UIN,DZDDB
      COMMON/DERIVS/ DADT,D2A,DPDT,D2P
      DADT=0.
      D2P=0.
      D2A=0.
      DPDT=0.
      Q=0.D0
      QZ=0.D0
      Q11=0.D0
      E=DEXP(-AA*D)
      Q10=D*D*E
      Q20=1.D0-E
      XX=DABS(AA*D)
      IF(XX.LT.1.D-5) Q20=AA*D
      DO 10 I=1,N
      K=II(I)
      L=JJ(I)
      V=T/TC
      ZZ=K+1
      FCT=Q10*Q20**K*V**(1-L)
      DFCT=(2./D-AA+K*E*AA/Q20)*FCT
      DFDT=Q20**(K+1)*(1-L)*V**(-L)/TC/AA/ZZ
      D2F=L*DFDT
      DPT=DFDT*D*D*E*AA*ZZ/Q20
      D2PA=L*DPT
      DADT=DADT+A(I)*DFDT
      DPDT=DPDT+A(I)*DPT
      D2A=D2A+A(I)*D2F
      D2P=D2P+A(I)*D2PA
      B=A(I)*FCT
      Q11 = Q11 + A(I)*DFCT
      Q = Q + B
      Y=Q20/AA/Q10/ZZ
      QZ = QZ + B*Y
   10 CONTINUE
      RETURN
      END
CC
```

```
      SUBROUTINE DFIND(DOUT,P,D,T,DPD)
C  "DFIND" IS A SUBROUTINE THAT FINDS BY AN ITERATIVE PROCESS THE DENSITY
C   "DOUT" CORRESPONDING TO THE INPUT PRESSURE "P", TEMPERATURE "T", AND
C  BEGINNING THE ITERATION WITH AN INITIAL GUESS FOR THE DENSITY "D".
C  DP/DRHO IS ALSO RETURNED AS A BYPRODUCT "DPD".
      IMPLICIT DOUBLE PRECISION(A-H,O-Z)
      COMMON /QCQQ/ Q0,Q1,Q2,Q10,Q20,Q11,Q7,Q8,Q9,Q010
      COMMON /ACONST/ TR,PC,GASCON,TC,AA,WTMOL,SZZ,RHOC,RR,ATMBAR
     1,XMLIT,PTR,UIN,DZDDB
      TOL=1.0D-07
      DD=D
      DDD=D
      PSAT=20000.
      IF(T.LT.TC) PSAT=PS(T)
      L=0
    9 L=L+1
      IF(DD.LE.0.) DD=1.D-7
      CALL QQ(T,DD)
      PP=PBASE(DD,T)+Q0
      DPD = GASCON*T*DZDDB+ Q11
      DPDX=DPD*1.5
C     IF(DPD.LT.1.D3) DPDX=DPDX*1.5
      IF(DPD.LT..2D3) DPDX=DPDX*1.5
      IF(DPDX.GT.0.) GO TO 10
      IF(P.GT.PSAT) X=.04*DD
      IF(P.LT.PSAT) X=-.04*DD
      GO TO 15
   10  X1=D
       XX=DD
C     IF(PP.LT.0.) WRITE(6,1001) T,P,X1,PP,XX
C1001 FORMAT(' NEGATIVE P FOR T,PIN,DIN,PCALC,DCALC',5D12.5)
      IF(PP.LT.0..AND.P.LT.PSAT) DD=DD/1.05D0
      IF(PP.LT.0..AND.P.GT.PSAT) DD=1.08D0*DD
      IF(DPDX.GT.1.D4) TOL=1.0D-5
      IF(DPDX.GT.1.D6) TOL=1.0D-4
      IF(DPDX.GT.1.D8) TOL=1.0D-3
      IF(DABS(1.-PP/P).LT.TOL) GO TO 20
      X2=(P-PP)/DPDX
      X=X2
      STEP=.04
      IF(T.GT.TC) GO TO 13
      X3=T/TC
      IF(X3.GT..85) STEP=STEP*.1
   13 IF(DABS(X2).LT.STEP) GO TO 15
      X=X2*STEP/DABS(X2)
   15 DD=DD+X
      IF(DD.LE.0.) DD=1.D-8
      IF(L.LE.50) GO TO 9
      DD=DD-X
      X2=X2/DD
      WRITE(6,1000)P,PP,X1,XX,T,X2,DPD
   20 CONTINUE
      DOUT=DD
 1020 FORMAT(' 50 ITERATIONS  IN DFIND PIN PCALC DIN DCALC T FRAC
     1DPD',4D13.6/3D13.6)
      RETURN
      END
```

```
CC
      FUNCTION GESVAP(T)
C FUNCTION TO GIVE APPROXIMATE VALUE FOR SATURATED VAPOR DENSITY
C  AS FCT OF T TO USE AS INITIAL GUESS IN DFIND.
      IMPLICIT DOUBLE PRECISION(A-H,O-Z)
      COMMON/ELLCON/G1,G2,GF,B1,B2,B1T,B2T,B1TT,B2TT,GAM
      COMMON /ACONST/ TR,PC,GASCON,TC,AA,WTMOL,RHOTR,RHOC,GASBAR,ATMBAR
     1,XMLIT,PTR,UIN
      TEMP=1.-T/TC
      X=1./3.
      X1=-1.98254*TEMP**X
      X=3./3.
      X2=-5.88824*TEMP**X
      X=8./3
      X3=-10.2778*TEMP**X
      X=20./3.
      X4=-261.091*TEMP**X
      XX=X1+X2+X3+X4
      GESVAP=DEXP(XX)*RHOC
      RETURN
      END
CC
      FUNCTION GESLIQ(T)
C FUNCTION TO GIVE APPROXIMATE VALUE FOR SATURATED LIQUID DENSITY
C  AS FCT OF T TO USE AS INITIAL GUESS IN DFIND.
      IMPLICIT DOUBLE PRECISION(A-H,O-Z)
      COMMON/ELLCON/G1,G2,GF,B1,B2,B1T,B2T,B1TT,B2TT,GAM
      COMMON /ACONST/ TR,PC,GASCON,TC,AA,WTMOL,RHOTR,RHOC,GASBAR,ATMBAR
     1,XMLIT,PTR,UIN
      DATA A0,A1,A2,A3,A4/7.29944D0,10.6721D0,-19.482D0,14.6244D0
     1,-2.38681D0/
      IF(T.LE.400.) GO TO 5
      XX=1.-T/TC
      X3=XX**.33333333
      EPS=.35D0
      Y=A0*XX**EPS + XX*(A1+X3*(A2+X3*(A3+X3*A4)))
      DL=RHOC+Y*XMLIT*WTMOL
      GESLIQ=DL
      RETURN
    5 GESLIQ = .2775 + .003152*T - 7.422D-6*T*T
      RETURN
      END
CC
      SUBROUTINE SPROPS(T,P,DL,DV)
C THIS SUBROUTINE GENERATES THE PROPERTIES OF ISOBUTANE AT SATURATION
C  AND IS CALLED BY THE MAIN PROGRAM WHEN SATURATION LINE IS CROSSED.
      IMPLICIT DOUBLE PRECISION(A-H,O-Z)
      COMMON /UNITS/ IT,ID,IP,IH,NT,ND,NP,NH,FT,FD,FP,FH
      COMMON /QQQQ/ Q0,Q1,QB,Q3,Q4,Q5,QHB,QUP,QCB,DPDTB,ELEM
      COMMON/DERIVS/ DADT,D2A,DPDTR,D2P
      COMMON/ELLCON/G1,G2,GF,B1,B2,B1T,B2T,B1TT,B2TT,GAM
      COMMON /NCONST/ G(40),MM(40),NK(40),NC
      COMMON /ACONST/ TR,PC,GASCON,TC,AA,WTMOL,SZZ,RHOC,RR,ATMBAR
     1,XMLIT,PTR,UIN,DPDDB
   60 CALL FZ(T,GZ,HZ,SZ,CPZ)
```

```
      UZZ=UIN/RR/T*WTMOL
      UZ=HZ-1.
      CVZ=CPZ-1.
      AZ=UZ-SZ
      ZZ=P/DV/T/GASCON
      PDUM=PBASE(DV,T)
      CALL QQ(T,DV)
      DQ=GASCON*T*DPDDB + Q5
      GRT=QB+Q1/T/GASCON+AZ+DLOG(DV*T*1.43045/ATMBAR)+ZZ-UZZ
      URT=QUB+Q1/GASCON/T-DADT/GASCON+UZ-UZZ
      DPDTV=DPDTB+DPDTR
      CVR=CVZ+QCB+D2A/GASCON
      UV=URT*RR*T*FH/WTMOL
      CPR=CVR+T*(DPDTV)**2/DV/DV/DQ/GASCON
      DPDTV=DPDTV*FT
      CV=DSQRT(DABS(CPR*DQ*1.D2/FP/CVR))
C FOLLOWING LINE TO CONVERT C FROM M/SEC TO FT/SEC
      IF(ID.EQ.4) CV=CV*3.2825
      HRT=URT+ZZ
      HV=(HRT*T)*RR*FH/WTMOL
      SR=HRT-GRT-SZZ
      SV=SR*RR*FT*FH/WTMOL
      ART=GRT-ZZ
      CPV=CPR*RR*FT*FH/WTMOL
      CVV=CVR*RR*FT*FH/WTMOL
      DV1=DV/FD
      DPDDV=DQ*FD
      CALL QQ(T,DL)
      PDUM=PBASE(DL,T)+Q0
      ZZ=P/DL/T/GASCON
      DQ=GASCON*T*DPDDB + Q5
      GRT=QB+Q1/T/GASCON+AZ+DLOG(DL*T*1.43045/ATMBAR)+ZZ-UZZ
      URT=QUB+Q1/GASCON/T-DADT/GASCON+UZ-UZZ
      DPDTL=DPDTB+DPDTR
      CVR=CVZ+QCB+D2A/GASCON
      UL=URT*RR*T*FH/WTMOL
      CPR=CVR+T*(DPDTL)**2/DL/DL/DQ/GASCON
      DPDTL=DPDTL*FT
      CL=DSQRT(DABS(CPR*DQ*1.D2/FP/CVR))
      IF(ID.EQ.4) CL=CL*3.2825
      HRT=URT+ZZ
      HL=(HRT*T)*RR*FH/WTMOL
      HEATV=HV-HL
      SR=HRT-GRT-SZZ
      SL=SR*RR*FT*FH/WTMOL
      ART=GRT-ZZ
      CPL=CPR*RR*FT*FH/WTMOL
      CVL=CVR*RR*FT*FH/WTMOL
      DL1=DL/FD
      DPDDL=DQ*FD
      TT=TTI(T)
      IF(ID.NE.2)WRITE(6,21) TT,P,DL1,DPDTL,DPDDL,CVL,CPL,SL,HL,UL,CL
      IF(ID.EQ.2)WRITE(6,2101) TT,P,DL1,DPDTL,DPDDL,CVL,CPL,SL,HL,UL,CL
      WRITE(6,22)
      IF(ID.NE.2)WRITE(6,21) TT,P,DV1,DPDTV,DPDDV,CVV,CPV,SV,HV,UV,CV
```

```
      IF(ID.EQ.2)WRITE(6,2101) TT,P,DV1,DPDTV,DPDDV,CVV,CPV,SV,HV,UV,CV
   21 FORMAT(F8.2,F11.3,F11.3,F10.4,F10.5,3F11.4,F11.2,F12.2,F10.2,F9.4)
 2101 FORMAT(F8.2,F11.3,F11.6,F10.4,F10.2,3F11.4,F11.2,F12.2,F10.2,F9.4)
   22 FORMAT('----------------------------------------------------------
     1----------------------------------------------------------')
      RETURN
      END
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10. SUPPLEMENTARY NOTES

[ ] Document describes a computer program; SF-185, FIPS Software Summary, is attached.

11. ABSTRACT (A 200-word or less factual summary of most significant information. If document includes a significant bibliography or literature survey, mention it here)

A thermodynamic surface is presented for the thermodynamic properties of isobutane for temperatures from 250 to 600 K and pressures up to 40 MPa, exclusive of the critical region. The surface expressed analytically is in the form of the Helmholtz free energy as a function of temperature and density. The Helmholtz free energy is based upon three contributions: that of the ideal gas, of a physically based function incorporating the effects of molecular repulsion and attraction, and of a sum of residual terms that compensate for inadequacies of the physically based function. The surface is in accord with selected validated pressure-density-temperature data to within an average density tolerance of 0.1 percent and the liquid region with the exception of the critical region. Thermodynamic tables of isobutane expressed in three different unit systems and the computer programs for generating the properties are presented in the paper.

12. KEY WORDS (Six to twelve entries; alphabetical order; capitalize only proper names; and separate key words by semicolons)

Helmholtz free energy functions; isobutane; saturated vapor pressure; thermodynamic properties

13. AVAILABILITY

[X] Unlimited

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