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U.S. DEPARTMENT OF COMMERCE / National Bureau of Standards

Standard Reference Data Publications 1964-1980

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[1]Headquarters and Laboratories at Gaithersburg, MD, unless otherwise noted; mailing address Washington, DC 20234.
[2]Some divisions within the center are located at Boulder, CO 80303.

Standard Reference Data Publications 1964-1980

Gertrude B. Sherwood

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Foreword

The National Standard Reference Data System was established in 1963 for the purpose of promoting the critical evaluation and dissemination of numerical data of the physical sciences. The program is coordinated by the Office of Standard Reference Data of the National Bureau of Standards but involves the efforts of many groups in universities, government laboratories, and private industry. The primary aim of the program is to provide compilations of critically evaluated physical and chemical property data. These tables are published in the *Journal of Physical and Chemical Reference Data*, in the NSRDS-NBS series of the National Bureau of Standards, and through other appropriate channels.

The task of critical evaluation is carried out in various data centers, each with a well-defined technical scope. A necessary preliminary step to the critical evaluation process is the retrieval from the world scientific literature of all papers falling within the scope of the center. Each center, therefore, builds up a comprehensive well-indexed bibliographical file which forms the base for the evaluation task. Bibliographies derived from these files are published when they appear to be of value to research workers and others interested in the particular technical area.

Further information on NSRDS and the publications which form the primary output of the program may be obtained by writing to the Office of Standard Reference Data, National Bureau of Standards, Washington, DC 20234.

David R. Lide, Jr., Chief
Office of Standard Reference Data

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Office of Standard Reference Data, National Bureau of Standards, Washington, D C 20234

This document provides a comprehensive list of the outputs of the National Standard Reference Data System (NSRDS) with author, materials, and property indexes for the years 1964–1980. NSRDS data centers prepare evaluated data bases of physical and chemical properties of substances. The program is managed by the National Bureau of Standards' Office of Standard Reference Data. Data bases are available in printed form, on magnetic tapes, and through online computer networks.

Key words: atomic and molecular properties; bibliographies; chemical kinetics; evaluated data; fluid properties; indexes; publication list; solid state; thermodynamic and transport properties.

Introduction

The National Standard Reference Data System (NSRDS), established in 1963, coordinates on a national scale the production and dissemination of reference data in the physical sciences. Under the Standard Reference Data Act (Public Law 90–396) the National Bureau of Standards (NBS) of the U.S. Department of Commerce has the primary responsibility in the Federal Government for providing reliable scientific and technical data. The Office of Standard Reference Data at NBS coordinates a complex of data evaluation centers, located in university, industrial, and other Government laboratories as well as within NBS. These centers compile and critically evaluate numerical physical and chemical property data retrieved from the world's scientific literature.

This publications list includes NSRDS data compilations, critical reviews, and publications which are available from various sources. Prices and ordering instructions for publications listed are given in Section XIII and XIV. Further information may be obtained from:

Office of Standard Reference Data
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Washington, DC 20234

I. Journal of Physical and Chemical Reference Data

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Activation energies of chemical reactions

See: Rate constants of chemical reactions

Activity coefficients

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See: Energy bands of solids

Band spectra

See: Electronic molecular spectra

Binding energy

See: Atomic energy levels and spectra
Bond dissociation energy
Electron affinity

Boiling point

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See: Elastic constants

Cell constants

See: Lattice constants

Combustion, heat of

See: Heat of combustion
Thermodynamic properties

Compressibility factor

See: Elastic constants
Equation of state

Compton scattering cross section

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Condensation coefficient

See: Evaporation and condensation coefficients

Conductance

See: Electrical conductance

Conductivity, thermal

See: Thermal conductivity

Consolute point

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Photon cross section
Rayleigh scattering cross section

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Diffusivity

See: **Thermal conductivity**

Dipole moment

See: **Electric dipole moment of molecules**
Nuclear moments

Dissociation energy

See: **Bond dissociation energy**

Effective mass

See: **Semiconductor properties**

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Energy, binding

See: Bond dissociation energy
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Energy, dissociation

See: Bond dissociation energy
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See: Energy bands of solids
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Energy levels

See: Atomic energy levels and spectra
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See: Thermodynamic properties

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See: Heat of formation
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See: Thermodynamic properties

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See: Electrical conductance

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See: Atomic energy levels and spectra

f–Values

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Line strengths

See: Transition probabilities for atoms and molecules

Line widths

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See: Dielectric constant

Magnetic moments

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Magnetic moments of molecules

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See: Rotational spectra

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See: Electron swarm parameters
Semiconductor properties

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See: Electronic molecular spectra
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Vibrational spectra (infrared, Raman)

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See: Electronic molecular spectra

Oscillator strengths

See: Transition probabilities for atoms and molecules

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See: Nuclear moments

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Specific conductance

See: Electrical conductance

Specific gravity

See: Density

Specific heat

See: Heat capacity
Thermodynamic properties

Spectra

See: Atomic energy levels and spectra
Electronic molecular spectra
Nuclear magnetic resonance spectra
Rotational spectra
Vibrational spectra (infrared, Raman)

Spectral line widths

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See: Crystal structure

Structure, molecular

See: Molecular structure

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Surface tension

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See: Thermal conductivity

Thermal expansion coefficient

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Virial coefficients

See: Equation of state

Viscosity

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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)*

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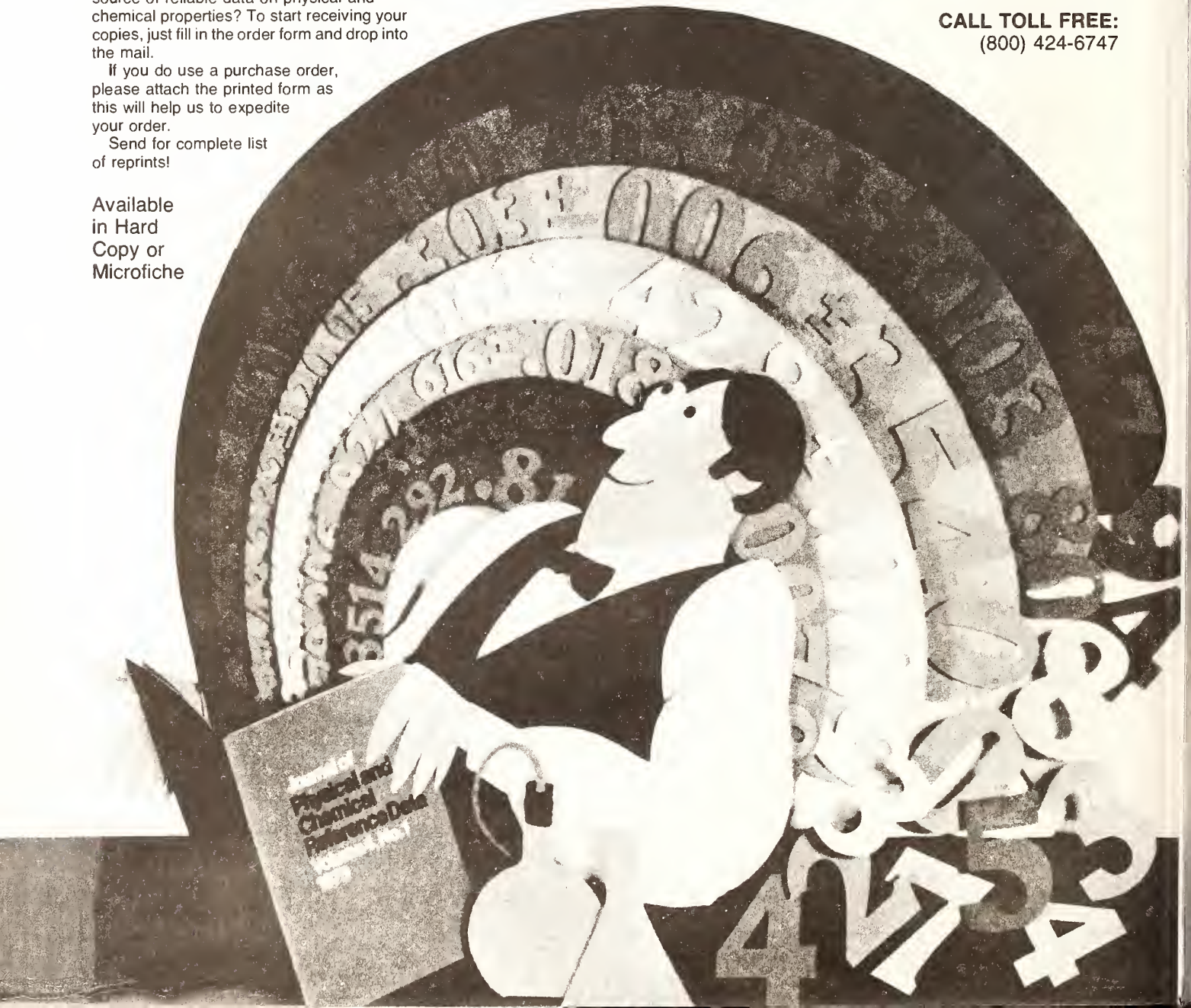

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