

CS68-38

Liquid Hypochlorite; Disinfectant, Deodorant, and Germicide

U. S. DEPARTMENT OF COMMERCE

DANIEL C. ROPER, Secretary

NATIONAL BUREAU OF STANDARDS

LYMAN J. BRIGGS, Director

LIQUID HYPOCHLORITE
DISINFECTANT, DEODORANT, AND
GERMICIDE

Bureau of Standards

SEP 30 1938

COMMERCIAL STANDARD CS68-38

Effective Date, June 10, 1938



A RECORDED STANDARD OF THE INDUSTRY

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1938

CERTIFICATION AND LABELING

8. The following form of statement on labels,² invoices, etc., is recommended:

The ----- Company certifies this liquid hypochlorite to conform to all requirements of the standard adopted by the NATIONAL ASSOCIATION OF INSECTICIDE AND DISINFECTANT MANUFACTURERS, INC., and recorded as Commercial Standard CS68-38 by the National Bureau of Standards of the U. S. Department of Commerce. Available chlorine ---- % by wt. Date of manufacture -----.

EFFECTIVE DATE

The standard became effective on June 10, 1938.

STANDING COMMITTEE

The following comprises the membership of the standing committee, which is to review, prior to circulation for acceptance, revisions proposed to keep the standard abreast of progress. Comment concerning the standard and suggestions for revision may be addressed to any member of the committee or to the Division of Trade Standards, National Bureau of Standards, which acts as secretary for the committee.

Manufacturers:

W. M. A. HADFIELD (chairman), General Laboratories, Division of Pennsylvania Salt Mfg., 1000 Widener Bldg., Philadelphia, Pa.

WALTER L. SAVELL, Mathieson Alkali Works, 60 E. 42d St., New York, N. Y.
W. J. ROTH, Clorox Chemical Co., 850 42d Avenue, Oakland, Calif.

Distributors:

J. W. SCHIFFER, The Federal Sanitation Co., Inc., 2340 Euclid Ave., Cleveland, Ohio.

F. A. HOYT, Frederick Disinfectant Co., Box 1556, Atlanta, Ga.

ELLIS DAVIDSON, Ellis Davidson Co., Inc., 38 W. 21st St., New York, N. Y.

Users:

Dr. A. H. JOHNSON, Sealtest, Inc., 1403 Eutaw Place, Baltimore, Md.

Dr. STROUD JORDAN, Department of Purchase, City of New York, New York, N. Y.

Dr. C. C. McDONNELL, Insecticide Division, Food and Drug Administration, U. S. Department of Agriculture, Washington, D. C.

General interest:

F. W. REYNOLDS (secretary), Division of Trade Standards, National Bureau of Standards, Washington, D. C.

HISTORY OF PROJECT

On September 20, 1937, the National Association of Insecticide and Disinfectant Manufacturers, Inc., requested the establishment of a commercial standard for liquid hypochlorite disinfectant, deodorant, and germicide, and submitted as a basis for such a standard, a specification adopted officially by the Association and followed by a large proportion of the membership.

The Division of Trade Standards consulted other interested individuals and organizations, and led the discussion of the proposed commercial standard at a convention of the Association in New York City

² When used on labels, this statement is in addition to, and not in lieu of, the ingredient statement required by the Insecticide Act of 1910.

on December 6, 1937. After discussion, the convention voted to recommend establishment of a commercial standard through the regular procedure of the National Bureau of Standards.

In view of the large consumer and distributor participation during the Association convention and subsequent review of the proposed commercial standard by the Federal Food and Drug Administration, it appeared that the purpose of a public hearing had been accomplished and the situation did not warrant the calling of a general conference for further consideration of the specification.

Accordingly, on March 23, 1938, the recommended commercial standard was circulated to the industry for written acceptance by producers, distributors, and users. Following satisfactory acceptance and in the absence of active opposition, the establishment of the standard was announced June 10, 1938.

ACCEPTANCE OF COMMERCIAL STANDARD

This sheet properly filled in, signed, and returned will provide for the recording of your organization as an acceptor of this commercial standard.

Date _____

Division of Trade Standards,
National Bureau of Standards,
Washington, D. C.

Gentlemen:

Having considered the statements on the reverse side of this sheet, we accept the Commercial Standard CS68-38 as our standard of practice in the

Production¹

Distribution¹

Use¹

of liquid hypochlorite.

We will assist in securing its general recognition and use, and will cooperate with the standing committee to effect revisions of the standard when necessary.

Signature of individual officer _____

(In ink)

(Kindly typewrite or print the following lines)

Name and title of above officer _____

Company _____

(Fill in exactly as it should be listed in pamphlet)

Street address _____

City and State _____

¹ Please designate which group you represent by drawing lines through the other two. Please file separate acceptances for all subsidiary companies and affiliates which should be listed separately as acceptors. In the case of related interests, trade papers, colleges, etc., desiring to record their general approval, the words "in principle" should be added after the signature.

TO THE ACCEPTOR

The following statements answer the usual questions arising in connection with the acceptance and its significance:

1. *Enforcement.*—Commercial standards are commodity specifications voluntarily established by mutual consent of the industry. They present a common basis of understanding between the producer, distributor, and consumer and should not be confused with any plan of governmental regulation or control. The United States Department of Commerce has no regulatory power in the enforcement of their provisions, but since they represent the will of the industry as a whole, their provisions through usage soon become established as trade customs, and are made effective through incorporation into sales contracts by means of labels, invoices, and the like.

2. *The acceptor's responsibility.*—The purpose of commercial standards is to establish for specific commodities, nationally recognized grades or consumer criteria, and the benefits therefrom will be measurable in direct proportion to their general recognition and actual use. Instances will occur when it may be necessary to deviate from the standard and the signing of an acceptance does not preclude such departures; however, such signature indicates an intention to follow the commercial standard where practicable, in the production, distribution, or consumption of the article in question.

3. *The Department's responsibility.*—The major function performed by the Department of Commerce in the voluntary establishment of commercial standards on a Nation-wide basis is fourfold: first, to act as an unbiased coordinator to bring all branches of the industry together for the mutually satisfactory adjustment of trade standards; second, to supply such assistance and advice as past experience with similar programs may suggest; third, to canvass and record the extent of acceptance and adherence to the standard on the part of producers, distributors, and users; and fourth, after acceptance, to publish and promulgate the standard for the information and guidance of buyers and sellers of the commodity.

4. *Announcement and promulgation.*—When the standard has been endorsed by companies representing a satisfactory majority of production, the success of the project is announced. If, however, in the opinion of the standing committee of the industry or the Department of Commerce, the support of any standard is inadequate, the right is reserved to withhold promulgation and publication.

ACCEPTORS

The organizations and individuals listed below have accepted this specification as their standard of practice in the production, distribution, and use of liquid hypochlorite disinfectant, deodorant, and germicide. Such endorsement does not signify that they may not find it necessary to deviate from the standard, nor that producers so listed guarantee all of their products to conform with the requirements of this standard. Therefore, specific evidence of quality certification should be obtained where required.

ASSOCIATIONS

- American College of Surgeons, Chicago, Ill.
- American Hospital Association, Committee on Simplification and Standardization of Hospital Furnishings, Supplies and Equipment, Chicago, Ill.
- American Hotel Association of the United States & Canada, New York, N. Y. (In principle.)
- American Sanatorium Association, New York, N. Y.
- Associated Industries, Ashton, Md.
- National Council of Women, Consumer Interests, Belmont, Mass.
- Overlook Hospital Association, Summit, N. J.

FIRMS

- Abbott Co., The, Milwaukee, Wis.
- Ace Supply Co., Detroit, Mich.
- Acme Chemical Co., Milwaukee, Wis.
- Acme Exterminating Co., Boston, Mass.
- Acme Refining Co., The, Cleveland, Ohio.
- Acme Sanitary Supply Co., Denver, Colo.
- Alabama School Supply Co., Montgomery, Ala.
- Allen & Vickers, Atlanta, Ga. (In principle.)
- Allott Hardware Co., Alliance, Ohio.
- American Brush Co., Portland, Oreg.
- American Desk Manufacturing Co., Temple, Tex.
- American Disinfectant Co., Washington, D. C.
- American Disinfecting Co., Inc., Sedalia, Mo.
- American Fluoride Corporation, New York, N. Y.
- American Oil and Disinfectant Corporation, New York, N. Y.
- Antrol Laboratories, Inc., Los Angeles, Calif.
- Apex Soap and Sanitary Corporation Pittsburgh, Pa.

- Apothecaries Hall Co., Waterbury, Conn.
- Argosy Manufacturing Co., Kansas City, Mo.
- Arkansas Paper Co., Little Rock, Ark.
- Armitage Exterminating Co., A., Chicago, Ill.
- Arnold Drug Co., Topeka, Kans.
- Astor Exterminating Co., Boston, Mass.
- Atkins Manufacturing Co., Columbia, Mo.
- Atlantic Refining Co., Philadelphia, Pa. (In principle.)
- Atlas Sanitary Products, Inc., Wildwood, N. J.
- Auto-Laks Manufacturing Co., Inc., New York, N. Y.
- Avidan, Inc., Henry G., Freeport, N. Y.
- Azuria Chemical Co., Inc., Akron, Ohio.
- Baird & McGuire, Inc., Holbrook, Mass., and St. Louis, Mo.
- Bamford, Inc., M. W., Reading, Pa. (In principle.)
- Banner Manufacturing Co., Denver, Colo.
- Baptist State Hospital, Little Rock, Ark.
- Baron Co., Inc., H. J., El Paso, Tex.
- Barton Chemical Co., Chicago, Ill.
- Beck Co., Arthur, Chicago, Ill.
- Bell Co., S. H., Pittsburgh, Pa.
- Benton Service Co., Cortland, N. Y.
- Berger Supply Co., Inc., S. J., Brooklyn, N. Y.
- Berghauser Co., J. W., Scranton, Pa.
- Bernstein Co., The, Los Angeles, Calif.
- Best Chemical Co., Ft. Worth, Tex.
- Beuret Chemical Laboratories, Fort Wayne, Ind.
- Blue Heven Corporation, The, N. Kansas City, Mo.
- Blue Ribbon Sanitary Products, St. Louis, Mo.
- Bohman Brothers, Inc., Hartford, Conn.
- Boren & Malone Co., Wewoka, Okla.
- Bragdon Paint Co., M. F., Portland, Maine.
- Braham Laboratories, Inc., Cleveland, Ohio.

- Breslau & Lyndwood Supply Co.,
Plymouth, Pa.
- Breuer Electric Manufacturing Co.,
Chicago, Ill. (In principle.)
- Brigham Co., C. T., Pittsfield, Mass.
- Brilliant Chemical Co., Inc., Brooklyn,
N. Y.
- Brown, Inc., I. Edward, New York,
N. Y.
- Buffalo Scientific Co., Buffalo, N. Y.
- Builders' Specialty Co., Peoria, Ill. (In
principle.)
- Building Supply Co., Chicago, Ill.
- Butler Co., William, Providence, R. I.
- By-Joy Chemical Products, Stockton,
Calif.
- Cabell Chemical Co., The, Huntington,
W. Va.
- Calde Exterminating Co., New York,
N. Y.
- Caldwell, Pittsburgh, Pa.
- Canadian Germicide Co., Ltd., Toronto,
Canada.
- Capitol Paper Co., Hartford, Conn.
(In principle.)
- Castle Chemical Co., New Castle, Pa.
- Centennial Drug and Supply Co.,
Denver, Colo.
- Central Chemical Co., Kansas City,
Mo.
- Central Mercantile Co., St. Joseph, Mo.
- Central Supply Co., Buffalo, N. Y.
- Central Wisconsin Paper Co., Wausau,
Wis.
- Certified Products Co., Inc., Birmingham,
Ala.
- Certified Supply Co., New York, N. Y.
- Chafee Supply Service, Shelbyville, Ind.
- Chapman & Sons Co., W. H., Wheeling,
W. Va. (In principle.)
- Charlotte Sanitary Supply Co., Charlotte,
N. C.
- Chemical Products, Inc., Shelton, Conn.
- Chemical Specialties Co., Milwaukee,
Wis.
- Chemical Spray Co., Minneapolis, Minn.
- Chemical Supply Co., The, Cleveland,
Ohio.
- Children's Country Home, Westfield,
N. J.
- Chippewa Products Co., St. Louis, Mo.
- Chrisman Supply Co., Inc., Fayette-
ville, N. Y.
- City Janitor Supply and Brush Co.,
St. Louis, Mo.
- Clark Products Co., Springfield, Mass.
- Clark's Store Fixtures, Flint, Mich.
- Clarkson Chemical Co., Inc., S. Wil-
liamsport, Pa.
- Cochrane Co., Billerica, Mass.
- Cody Chemical Co., Manchester, N. H.
- Colborn School Supply Co., Grand
Forks, N. Dak.
- Conray Products Co., New York, N. Y.
- Consolidated Drug Corporation, New
Orleans, La.
- Consumers' Testing Laboratories, Phil-
adelphie, Pa. (In principle.)
- Continental Chemical Co., The, Cleve-
land, Ohio.
- Cooper, D. L., Brooklyn, N. Y.
- Copley Chemical Co., Everett, Mass.
- Cotton Products Co., Des Moines,
Iowa.
- Creco Co., Inc., Long Island City,
N. Y.
- Crosetti Bro. & Co., A., San Francisco,
Calif.
- Crown Chemical Corporation, Mil-
waukee, Wis.
- Danville Wholesale Drug Co., Inc.,
Danville, Ill.
- Darrow Chemical Co., Kansas City,
Mo.
- David & Blankfield, Inc., San Antonio,
Tex.
- Davies & Co., Inc., Henry K., New
York, N. Y., or N. Bergen, N. J.
- Deco Products Co., Inc., New York,
N. Y.
- Delta Chemical Co., New York, N. Y.
- Delta Plumbing Supply Co., Inc., New
Orleans, La.
- DeLuxe Broom Co., Portland, Oreg.
- Del-Zo Co., Atlanta, Ga. (In prin-
ciple.)
- Den Wal Mfg. Co., The, Piermont,
N. Y.
- Dentocide Chemical Co., Baltimore,
Md.
- DeVine Laboratories, Inc., J. F., Goshen,
N. Y.
- Dixie Chemical Co., Inc., New Orleans,
La.
- Dixie Chemical Products Co., Ltd.,
Birmingham, Ala.
- Dixie Disinfecting Co., Dallas, Tex.
- Dolge Co., C. B., Westport, Conn.
- Dow Chemical Co., The, Midland,
Mich. (In principle.)
- Dreyfus Janitor Supply Co., Ponca
City, Okla.
- Eau Claire Book and Stationery Co.,
Milwaukee, Wis.
- Ellis Products Co., Detroit, Mich.
- Empire Chemical Co., Brooklyn, N. Y.
- Ens-Em Chemical Co., New York,
N. Y. (In principle.)
- Enterprise Mill Soap Works, Philadel-
phia, Pa.
- Ephraim, Inc., Jerome W., New York,
N. Y.
- Ewing Paper Co., B. G., Spokane,
Wash.
- Exterminator Engineering Corporation,
Chicago, Ill.
- Federal Sanitation Co., Inc., The, Cleve-
land, Ohio.
- Fergusson Co., Alex C., Philadelphia,
Pa.
- Fidelity Fire Protection Co., Philadel-
phia, Pa.
- Fischbeck Co., Inc., Charles, New
York, N. Y. (In principle.)
- Fox Midwest Amusement Corporation,
Kansas City, Mo.

- Frankle, Inc., Jos. E., Philadelphia, Pa.
 Franklin Chemical Co., Rochester,
 N. Y.
 Franklin Drug Store, Port Arthur, Tex.
 Franklin Products Corporation, Tampa,
 Fla.
 Franklin Thrift Stores Co., The, Piqua,
 Ohio.
 Frontier Alkali Corporation, Buffalo,
 N. Y.
 Frye Co., Geo. C., Portland, Maine.
 (In principle.)
 Fuld Brothers, Baltimore, Md.
 G-I-Cleaning Products, Chicago, Ill.
 Gakenheimer's Pharmacy, Baltimore,
 Md.
 Gates Medicine Co., Charleston, W. Va.
 Getem Manufacturing Co., Norfolk, Va.
 Gillam Soap Works, Ft. Worth, Tex.
 Givaudan-Delawanna, Inc., New York,
 N. Y. (In principle.)
 Gleam Products Corporation, Bronx,
 N. Y.
 Gobell Co., John J., New Bedford,
 Mass.
 Goble Printing Co., The D. H., Green-
 field, Ind.
 Government Chemical Co., Cleveland,
 Ohio.
 Grant Laboratories, Oakland, Calif.
 Great Falls Paper Co., Great Falls,
 Mont.
 Great Lakes Chemical Utilities, Buffalo,
 N. Y.
 Greenbaum Co., Inc., C. D., New York,
 N. Y.
 Griffin Bros., Inc., Portland, Oreg.
 Griffin Chemical Co., San Francisco,
 Calif. (In principle.)
 Gulf Oil Corporation, Pittsburgh, Pa.
 (In principle.)
 Gulf Refining Co., Pittsburgh, Pa. (In
 principle.)
 Gulf Research and Development Co.,
 Pittsburgh, Pa. (In principle.)
 H. & L. Products Co., Linden, N. J.
 (In principle.)
 Haag Laboratories, Inc., The, Chicago,
 Ill.
 Hammond & Son, Inc., W. P., Mil-
 waukee, Wis.
 Hart-Shaw Drug Co., Adrian, Mich.
 Hartford Sanitary Products Co., The
 Hartford, Conn.
 Heaney Manufacturing Co., Boston,
 Mass.
 Helgren Drug Co., Jamestown, N. Y.
 Hess & Clark, Inc., Dr., Ashland, Ohio.
 Hill Brothers Chemical Co., Los Angeles,
 Calif.
 Hillyard Chemical Co., St. Joseph, Mo.
 Hockwald Chemical Co., San Francisco,
 Calif.
 Holcomb Manufacturing Co., J. I.,
 Indianapolis, Ind.
 Hospital Bureau of Standards and Sup-
 plies, Inc., New York, N. Y.
- Household Chemical Products, Brook-
 lyn, N. Y.
 Household Products Co., Indianapolis,
 Ind.
 Hub City School Supply Co., Aberdeen,
 S. Dak.
 Huggins & Son, James, Malden, Mass.
 (In principle.)
 Hughes Chemical Co., Ft. Worth, Tex.
 Huisking & Co., Inc., Chas. L., New
 York, N. Y.
 Hunt Manufacturing Co., Cleveland,
 Ohio.
 Hy-Gien Laboratories, Inc., Amesbury,
 Mass.
 Hysan Products Co., Chicago, Ill.
 Imperial Chemical Co., Shenandoah,
 Iowa.
 Imperial Laboratories, Mt. Hope, W.
 Va.
 Imperial Products Co., Philadelphia, Pa.
 Imperial Sales Co., Halifax, Mass.
 Industrial Chemical Laboratories, Omaha,
 Nebr.
 Industrial Chemical Products Co., Phila-
 delphia, Pa.
 Industrial Distributors, Inc., New York,
 N. Y.
 Interstate Chemical Manufacturing Co.,
 Jersey City, N. J. (In principle.)
 Interstate Sanitation Co., Inc., The,
 Cincinnati, Ohio.
 Iowa Hospitals, State University of,
 Iowa City, Iowa.
 Jacques Beauty Supply, Omaha, Nebr.
 (In principle.)
 James Soap and Chemical Co., Houston,
 Tex.
 Janitorial Supply Co., Passaic, N. J.
 Janitor's Supply House, Cranston, R. I.
 Johns Hopkins Hospital, The, Balti-
 more, Md.
 Johnson Co., The George T., S. Boston,
 Mass.
 Jorgenson and Co., Los Angeles, Calif.
 Judson Co., The Dwight R., Hartford,
 Conn.
 Kalo Co., The, Quincy, Ill. (In prin-
 ciple.)
 Keller Products Co., Columbus, Ohio.
 Kemiko Manufacturing Co., Irvington,
 N. J.
 Kentucky Color and Chemical Co.,
 Louisville, Ky.
 Kerr Co., Frank W., Detroit, Mich.
 King Chemical Co., Philadelphia, Pa.
 Kling Exterminating Co., Chicago, Ill.
 Kretol Co., Inc., Washington, D. C.
 Krummenacher Drug Co., Clayton, Mo.
 L. B. Drug Co., The, Gadsden, Ala.
 La. Maison Products, Inc., Brooklyn,
 N. Y.
 Lambert Chemical Co., Kansas City,
 Mo.
 Leader Manufacturing Co., Wilkes-
 Barre, Pa.

- Lee Co., A., Lawrence, Mass.
 Lee Co., Geo. H., Omaha, Nebr.
 Lehn & Fink Products Corporation,
 Bloomfield, N. J.
 Lehrman & Sons, A. J., Harrisburg, Pa.
 Lesh Oil Co., Ottawa, Kans.
 Lien Chemical Co., Chicago, Ill.
 Lone Star Supply Co., Houston, Tex.
 Long Beach, Better Business Bureau of,
 Long Beach, Calif. (In principle.)
 Long Island Sanitary Supply Co.,
 Woodside, L. I., N. Y.
 Los Angeles, City of, Los Angeles,
 Calif.
 Los Angeles Chemical Co., Los Angeles,
 Calif.
 Louisiana Paper Co., Ltd., Shreveport,
 La.
 Loveland Janitor Supply Co., Wichita,
 Kans.
 Lowe Chemical Co., Nashville, Tenn.
 Mac Nair-Dorland Co., Inc., New York,
 N. Y. (In principle.)
 Magicleaner Corporation, New York,
 N. Y. (In principle.)
 Maine Germicide Co., Portland, Maine.
 Maintenance Supply and Service Co.,
 Chicago, Ill.
 Majestic Wax Co., Denver, Colo.
 Marjo Products Co., Chicago, Ill.
 Marlowe-Van Loan Corporation, High
 Point, N. C.
 Master Chemical Co., Milwaukee, Wis.
 Masury Young Co., Boston, Mass.
 McKone Sales Co., Hartford, Conn.
 McLeod Exterminating Service, Roch-
 ester, N. Y.
 Meyer Chemical Co., Sioux City, Iowa.
 Miami Products and Chemical Co.,
 The, Dayton, Ohio.
 Miller Chemical Co., Inc., Omaha, Nebr.
 Miller Co., J. E., Wheeling, W. Va.
 Miller Products Co., Portland, Oreg.
 (In principle.)
 Miracle Manufacturing Co., Ft. Wayne,
 Ind.
 Mirax Chemical Products Corporation,
 St. Louis, Mo.
 Missanna Laboratories, Inc., Little
 Rock, Ark.
 Monarch Printing and Supply Co., The,
 Marion, Ohio. (In principle.)
 Moulder, Oldham Co., Inc., Tulsa,
 Okla.
 Murtough Supply Co., Tacoma, Wash.
 Myers Paper Co., Memphis, Tenn.
 Nash Medical Co., F. A., Galena, Ill.
 National Chemical Co., New Orleans,
 La.
 National Cleanser Products Co., New
 York, N. Y.
 National Disinfecting Co., New York,
 N. Y.
 National Theatre Supply Co., Seattle,
 Wash.
 New England Disinfecting Co., Inc.,
 The, Boston, Mass.
- New Orleans, Inc., Better Business
 Bureau of, New Orleans, La. (In
 principle.)
 Neway Brush Co., Hartford, Conn. (In
 principle.)
 Newbro Drug Co., Butte, Mont.
 Newerking Cleaning Fluid Co., Inc.,
 New York, N. Y. (In principle.)
 Newport Industries, Inc., General Naval
 Stores Division, Pensacola, Fla. (In
 principle.)
 Newton & Co., A. E., Brooklyn, N. Y.
 North American Chemical Co., New
 York, N. Y.
 Northern Indiana Supply Co., Inc.,
 Kokomo, Ind.
 Northern School Supply Co., Fargo,
 N. Dak.
 Northern School Supply Co., Great
 Falls, Mont.
 Nu-Way Exterminating Co., Newark,
 N. J.
 O'Connor & Kremp, New York, N. Y.
 O-Dor-Cide Co., The, Newark, N. J.
 Omaha School Supply Co., Omaha,
 Nebr.
 Oneida Chemical Co., Inc., Utica, N. Y.
 Orange Memorial Hospital, Orange,
 N. J.
 Osgood Co., The Charles, Norwich,
 Conn.
 Pacific Marine Supply Co., Seattle,
 Wash.
 Palmer Products, Inc., Waukesha, Wis.
 Palmyra Lime Products Co., Clark-
 ville, Tenn.
 Panama Paint and Chemical Products
 Co., Panama City, Fla.
 Parkin Chemical Co., Newark, N. J.
 Paterson General Hospital, Paterson,
 N. J.
 Patterson Laboratories, Inc., Detroit,
 Mich.
 Patterson Laboratories, T. A., Cleve-
 land, Ohio, and Niagara Falls, N. Y.
 Peabody Anti-Dust Co., Peabody, Mass.
 (In principle.)
 Pearl Supply Co., New York, N. Y.
 Peerless Soap and Chemical Co., De-
 troit, Mich.
 Penn Waxing and Janitor Supplies,
 Wilkes-Barre, Pa.
 Pennsylvania, Commonwealth of, De-
 partment of Property and Supplies,
 Harrisburg, Pa.
 Pennsylvania Hospital, Philadelphia,
 Pa.
 Pennsylvania Salt Manufacturing Co.,
 General Laboratories Division, Phila-
 delphia, Pa.
 Phinney & Co., F. B., Hyde Park, Mass.
 Pine-O-Pine Co., Inc. of Texas, Houston,
 Tex.
 Pintell Co., The, New York, N. Y.
 Pittsburgh Insect Exterminating Co.,
 Pittsburgh, Pa.
 Pokadot Chemical Co., Greenville, Pa.

- Polar Chemical Co., Inc., The, Lewiston, Maine.
- Port Huron Detergent Co., Inc., Port Huron, Mich. (In principle.)
- Potter Drug and Chemical Corporation, Malden, Mass. (In principle.)
- Pottsville Show Case and Fixture Co., Pottsville, Pa.
- Powell & Co., Inc., John, New York, N. Y. (In principle.)
- Practical Drawing Co., Dallas, Tex.
- Preiser Co., Inc., B., Charleston, W. Va.
- Presto Chemical Co., Inc., New York, N. Y.
- Quality Products Laboratories, Inc., Richmond, Va.
- Range Paper Co., Inc., Virginia, Minn.
- Red Letter "J" Co., Germantown, Philadelphia, Pa.
- Remo Sanitation Co., Pittsburgh, Pa.
- Republic Chemical Co., Chicago, Ill.
- Reynolds & Sons, James T., Lapeer, Mich.
- Richmond Stationery Co., Inc., Richmond, Va. (In principle.)
- Rip Products, Jamaica, Long Island, N. Y.
- Robbins Disinfectant Co., Inc., Geo. B., Boston, Mass.
- Roberts & Meck, Inc., Harrisburg, Pa.
- Robertson Products Co., Inc., Theo. B., Chicago, Ill.
- Rochester Germicide Co., Rochester, N. Y. (In principle.)
- Rochester Janitor Supplies, Inc., Rochester, N. Y.
- Rochester Laboratories, Rochester, Minn. (In principle.)
- Rockwell Co., The, Pittsfield, Mass.
- Rose Exterminator Co. of San Francisco, Calif., San Francisco, Calif.
- Roure-Dupont, Inc., New York, N. Y. (In principle.)
- Rupp & Bowman Co., The, Toledo, Ohio.
- Rusk Oil Co. Inc., Philadelphia, Pa.
- St. John's Hospital, Brooklyn, N. Y.
- St. Louis Janitor Supply Co., St. Louis, Mo.
- St. Luke's Hospital, Bethlehem, Pa.
- Sancamo Disinfecting Co., Springfield, Ill.
- Sanitary Appliance Co., Elmira, N. Y.
- Sanitary Maintenance Co., Boston, Mass.
- Satrang & Cleminson, Inc., Sioux City, Iowa.
- Savannah Brush Co., Savannah, Ga.
- Sayers & Co., Philadelphia, Pa.
- Scientific Exterminating and Fumigating Co., W. New York, N. J.
- Scientific Supply Co., Inc., Denver, Colo.
- Scranton Better Business Bureau, Scranton, Pa. (In principle.)
- Seaver Laboratories, Beloit, Wis. (In principle.)
- Selig Co., The, Atlanta, Ga.
- Selma Chemical Products Co., New York, N. Y.
- Sentinel Chemical Co., Inc., Oakland, Calif.
- Sentinel Sanitary Supply Co., Oakland, Calif.
- Service Station Supply Co., Charlotte, N. C.
- Shearer Co. of California, B. F., San Francisco, Calif.
- Sheppard Supply Co., M. F., Bayonne, N. J.
- Sioux Falls Book and Stationery Co., Sioux Falls, S. Dak.
- Skinner & Sherman, Inc., Boston, Mass. (In principle.)
- Smith & Co., S. A., New York, N. Y.
- Snell, Inc., Foster D., Brooklyn, N. Y.
- Soap and Chemical, Inc., Pittsburgh, Pa.
- Solomons Co., Savannah, Ga.
- Solshine Manufacturing Co., Cambridge, Mass.
- Solvent Compounds Co., Redwood City, Calif.
- Southern Chemical Co., Charleston, W. Va.
- Southwestern Mill Distributors, El Paso, Tex.
- Speare's Sons Co., The Alden, Cambridge, Mass.
- Standard Chemical Co., St. Louis, Mo. (In principle.)
- Standard Janitors Supply Co., Inc., New York, N. Y.
- Standard School Co., St. Louis, Mich.
- Star Chemical Co., Inc., San Antonio, Tex.
- Star Drug Store, Galveston, Tex.
- Sterling Office and School Supply Co., Johnstown, Pa.
- Sterling Soap and Chemical Co., Inc., Wilmington, Del.
- Story & Robinson, Brooklyn, N. Y.
- Suhm Co., Inc. (Formerly Cream City Chemical Works), Milwaukee, Wis.
- Sunrise Supply Co., New York, N. Y.
- Superior Chemical Co., Houston, Tex.
- Superl Supply Co., Inc., Los Angeles, Calif.
- Sweet Ozone Co., Brooklyn, N. Y.
- Syracuse Victory Soap Corporation, Syracuse, N. Y.
- T. N. T. Exterminating Co., Akron, Ohio.
- Tanglefoot Co., The, (The O. & W. Thum Co.), Grand Rapids, Mich.
- Taylor Co., H. D., Buffalo, N. Y.
- Terra Chemical Corporation, New York, N. Y.
- Texas Household Supply, Dallas, Tex., and Ft. Worth, Tex.
- Toc's Products Co., Syracuse, N. Y.
- Traband & Co., Inc., Louis C., E. St. Louis, Ill.
- Tri-State Janitor Supply Co., Wilmington, Del.
- Triangle Products Co., Fairfield, Maine.

- Tropical Chemical Co. of California, Los Angeles, Calif.
- TryAid Chemical Products Co., Youngstown, Ohio.
- Tulip Grove Products, Inc., Hermitage, Tenn.
- Tumbler Laboratories, J. A., Baltimore, Md.
- Tunis Brothers Co., Kennett Square, Pa.
- Tyler Oil and Grease Corporation, Richmond, Va.
- Union Chemical and Supply Co., The, Akron, Ohio.
- U. S. Termite Control Corporation, Ltd., Pasadena, Calif.
- Universal Exterminating Co., Columbus, Ohio.
- University Publishing Co., The, Lincoln, Nebr.
- Van Denberg Supply Co., Rockford, Ill.
- Vasco Products Co., Inc., Elmira, N. Y.
- Vernon Drug Co., Middletown, N. Y.
- Vestal Chemical Co., St. Louis, Mo.
- Victory Chemical Co., Philadelphia, Pa.
- Waite Hardware Co., Worcester, Mass.
- Walsh, William Henry, Chicago, Ill.
- Ward Co., D. L., Philadelphia, Pa.
- Wasatch Chemical Co., Salt Lake City, Utah.
- Washington School Supply Co., Seattle, Wash.
- Waverly Manufacturing Co., Philadelphia, Pa. (In principle.)
- West Disinfecting Co., Long Island City, N. Y.
- Wetalene Lab., Inc., Columbus, Ohio. (In principle.)
- White Co., L. J., Chicago, Ill.
- White Co., Robert C., Philadelphia, Pa.
- White Tar Co. of N. J., Inc., The, Kearny, N. J.
- Wholesale Janitors' Supply Co., Chicago, Ill.
- Whopper Sales, Buffalo, N. Y.
- Wichita Broom and Floor Sweep Co., Wichita Falls, Tex. (In principle.)
- Wilbur Chemical Co., N. Bergen, N. J.
- Williams Chemical Laboratories, Springfield, Ill.
- Williams Co., J. A., Pittsburgh, Pa.
- Willis Sanitary Products Co., Lincoln, Nebr.
- Willis Supply Co., Duluth, Minn.
- Winsale Drug Co., Brooklyn, N. Y. (In principle.)
- Wisconsin, State of, Bureau of Purchases, Madison, Wis. (In principle.)
- Wollen Chemical and Supply Co., Paterson, N. J.
- Wonder Products Co., Salisbury, N. C.
- Woolf's Hypozone, Inc., New York, N. Y.
- Yaeger-Jacquin Co., Peoria, Ill.
- Zahr Soap Manufacturing Co., Kansas City, Mo.

U. S. GOVERNMENT

- Agriculture, U. S. Department of, Washington, D. C.
- Treasury Department, Washington, D. C.
- War Department, Washington, D. C.

COMMERCIAL STANDARDS

| CS No. | Item | CS. No. | Item |
|--------|--|---------|---|
| 0-30. | The commercial standards service and its value to business. | 40-32. | Surgeons' rubber gloves. |
| 1-32. | Clinical thermometers (second edition). | 41-32. | Surgeons' latex gloves. |
| 2-30. | Mopsticks. | 42-35. | Fiber insulating board (second edition). |
| 3-33. | Stoddard solvent (second edition). | 43-32. | Grading of sulphonated oils. |
| 4-29. | Staple porcelain (all-clay) plumbing fixtures. | 44-32. | Apple wraps. |
| 5-29. | Steel pipe nipples. | 45-36. | Douglas fir plywood (domestic grades) (second edition). |
| 6-31. | Wrought-iron pipe nipples (second edition). | 46-36. | Hosiery lengths and sizes (second edition). |
| 7-29. | Standard weight malleable iron or steel screwed unions. | 47-34. | Marking of gold-filled and rolled-gold-plate articles other than watch cases. |
| 8-33. | Gage blanks (second edition). | 48-34. | Domestic burners for Pennsylvania anthracite (underfeed type). |
| 9-33. | Builders' template hardware (second edition). | 49-34. | Chip board, laminated chip board, and miscellaneous boards for bookbinding purposes. |
| 10-29. | Brass pipe nipples. | 50-34. | Binders board for bookbinding and other purposes. |
| 11-23. | Regain of mercerized cotton yarns. | 51-35. | Marking articles made of silver in combination with gold. |
| 12-38. | Fuel oils (fourth edition). | 52-35. | Mohair pile fabrics (100-percent mohair plain velvet, 100-percent mohair plain frieze, and 50-percent mohair plain frieze). |
| 13-30. | Dress patterns. | 53-35. | Colors and finishes for cast stone. |
| 14-31. | Boys' blouses, button-on waists, shirts, and junior shirts. | 54-35. | Mattresses for hospitals. |
| 15-20. | Men's pajamas. | 55-35. | Mattresses for institutions. |
| 16-29. | Wall paper. | 56-36. | Oak flooring. |
| 17-32. | Diamond core drill fittings (second edition). | 57-36. | Book cloths, buckrams, and impregnated fabrics for bookbinding purposes except library bindings. |
| 18-29. | Hickory golf shafts. | 58-36. | Woven elastic fabrics for use in overalls (overall elastic webbing). |
| 19-32. | Foundry patterns of wood (second edition). | 59-36. | Woven dress fabrics—testing and reporting. |
| 20-36. | Staple vitreous china plumbing fixtures (second edition). | 60-36. | Hardwood dimension lumber. |
| 21-36. | Interchangeable ground-glass joints, stop-cocks, and stoppers (third edition). | 61-37. | Wood-slat venetian blinds. |
| 22-30. | Builders' hardware (nontemplate). | 62-38. | Colors for kitchen accessories. |
| 23-30. | Feldspar. | 63-38. | Colors for bathroom accessories. |
| 24-30. | Standard screw threads. | 64-37. | Walnut veneers. |
| 25-30. | Special screw threads. | 65-38. | Wool and part-wool fabrics. |
| 26-30. | Aromatic red cedar closet lining. | 66-38. | Marking of articles made wholly or in part of platinum. |
| 27-36. | Mirrors (second edition). | 67-38. | Marking articles made of karat gold. |
| 28-32. | Cotton fabric tents, tarpaulins, and covers. | 68-38. | Liquid hypochlorite disinfectant. |
| 29-31. | Staple seats for water-closet bowls. | 69-38. | Pine oil disinfectant. |
| 30-31. | Colors for sanitary ware. | 70-38. | Coal tar disinfectant (emulsifying type). |
| 31-35. | Wood shingles (third edition). | 71-38. | Cresylic disinfectants. |
| 32-31. | Cotton cloth for rubber and pyroxylin coating. | 72-38. | Household insecticide (liquid spray type). |
| 33-32. | Knit underwear (exclusive of rayon). | | |
| 34-31. | Bag, case, and strap leather. | | |
| 35-31. | Plywood (Hardwood and Eastern Red Cedar). | | |
| 36-33. | Fourdrinier wire cloth (second edition). | | |
| 37-31. | Steel bone plates and screws. | | |
| 38-32. | Hospital rubber sheeting. | | |
| 39-37. | Wool and part wool blankets (second edition). | | |

NOTICE.—Those interested in commercial standards with a view toward accepting them as a basis of everyday practice in their industry, may secure copies of the above standards, while the supply lasts, by addressing the Division of Trade Standards, National Bureau of Standards, Washington, D. C.

