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LITERATURE ON DRYCLEANING

This letter circular has been prepared to answer inquiries about sources of information on drycleaning and related processes. Most of the books and articles listed may be consulted in the large libraries. Prices are given only for those Government publications that are obtainable from the Superintendent of Documents, Government Printing Office, Washington, D. C.

Lists of manufacturers of equipment and supplies can be found in the trade directories, such as Thomas' Register of American Manufacturers, MacNair-Dorland Co.'s Soap Blue Book Catalog, and MacRae's Blue Book, which are available in most libraries, banks, and local Chambers of Commerce or Boards of Trade. Information on sources of supplies is also available in most of the trade journals.

References to current literature can be obtained by consulting the literature guides, such as Industrial Arts Index and Chemical Abstracts, which are available in libraries.

DRYCLEANING - SPOTTING AND WETCLEANING - FINISHING - DYEING

Drycleaning of rayon and spun rayon materials. C. C.
Hubbard. Rayon and Staple Fiber Handbook (Rayon Handbook Company, 303-305 Fifth Avenue, New York, N. Y.)
Chapter XVII, pp. 684-701. 3rd edition (1939).
Special attention is given to spotting and stain removal, especially with regard to acetate fabrics.

Drycleaning of woolens and worsteds. C. C. Hubbard.
American Wool Handbook (American Wool Handbook Company, 303 Fifth Avenue, New York, N. Y.) Chapter XX, pp. 673-694 (1938).

Considers inspection and sorting, drycleaning in petroleum solvent, drying, spotting problems, and redyeing.

Silk finishing. Jennie Wisneski Maher. (National Association of Dyers and Cleaners, Silver Spring, Md.) 271

pages (1938).

Deals with equipment and accessories for general and specialty finishing; fibers and fabrics, and finishing treatments applied in manufacture; general finishing after drycleaning; finishing decorative details; special problems, such as shine, dye and extractor wrinkles, bias cut, and fitting; linings; velvet finishing; knit blocking; pleating and fluting; sewing department; and inspection, assembly, and packaging.

Detergents and related subjects. Letter Circular LC-403. (National Bureau of Standards, Washington, D. C.) 10 pages (1938). Obtainable upon request.

Lists publications of National Bureau of Standards

and Federal specifications relating to detergents.

The drycleaning department. C. B. Randall. (National Association of Dyers and Cleaners, Silver Spring, Md.) 194

pages (1937). (New edition in press.)

Covers marking and inspection; preliminary steps in drycleaning; petroleum solvents and soaps used in them; standard practice runs; specialty cleaning; factors of cleaning room practice; clarification by chemical treatment, distillation, filtration, settling, and centrifugal force; cleaning with chlorinated hydrocarbons, including soaps used in them and methods of clarification; and storage.

Notes on the dyeing, cleaning, and finishing of garments and fabrics containing Celanese yarn. (Celanese Research Associate. National Association of Dyers and Cleaners, Silver Spring, Md.) 16 pages (1937).

Gives information on detection of Celanese, precautions in prespotting, spotting chart, dyeing, and finishing, including curtain cleaning and finishing.

- Denney's complete spotting guide. Cleaning and Laundry World (9/2 Lexington Avenue, New York, N. Y.) 352 pages (1937). The contents are divided into sections on formulas (prespotting and wetcleaning), stain removal, equipment and trade products.
- Spotting manual of the drycleaning industry. A. O. Fligor and Paul C. Trimble. Mational Cleaner and Dyer (305)
 East 45th Street, New York, N. Y.) 282 pages (1937).
 Includes information on identification of fabrics and stains, equipment, spotting procedures, spotting and refinishing of velvets, prespotting and wetcleaning, bleaches and sizings.

- Answers to 1001 questions on cleaning, spotting, and finishing. Arranged by Roy Denney. National Cleaner and Dyer (305 East 45th Street, New York, N. Y.) (1935).
- The renovation of upholstery furniture a profitable field for rug cleaners. George H. Edwards. Starchroom Laundry Journal, pp. 63-65 (August 15, 1934).

 Describes both wet and dry methods.
- Modern methods in drycleaning. George G. Gaubatz, Jr. (National Association of Dyers and Cleaners, Silver Spring, Md.) 212 pages (1931). (Out of print.)

 Describes all phases of drycleaning processes and finishing, including the cleaning of furs, hats, and rugs.
- How to clean rugs and upholstery fabrics. C. C. Hubbard (Silver Spring, Md.) 364 pages (1930).

 Discusses different types of floor coverings, detergents, cleaning operations, stain removal, insect control, storage, etc. Formulas are given.
- Stain removal from fabrics, home methods. Farmers Bulletin No. 1474 (U. S. Department of Agriculture) 30 pages (1930). Government Printing Office, Washington, D. C., price 5 cents.

 Discusses principles of stain removal and gives simple methods for removing different kinds of stains
- Practical science for the drycleaning industry. Warren K. Cooley. (National Association of Dyers and Cleaners, Silver Spring, Md.) 211 pages (1929).

 Discusses chemistry in relation to drycleaning.

from fabrics.

- Drycleaning and redyeing handbook. C. C. Hubbard (Silver Spring, Md.) 252 pages (1929).

 Handbook information on drycleaning practices, spotting, bleaching, stripping, dyeing, and finishing.
- Fastness of dyed fabrics to dry cleaning. A. S. Eichlin. BS
 J. Research 3, 39 (1929) RP80. 13 pp. Government
 Printing Office, Washington, D. C., price 5 cents.
 Gives data on the behavior of representative dyestuffs on wool, silk, rayon, and union fabrics when subjected to a moisture-free solvent and to a solvent containing O.l percent free moisture and O.Ol percent alkali.

- The instructor in garment cleaning. C. C. Hubbard. (National Association of Dyers and Cleaners, Silver Spring, Md.) 341 pages (1928). (Out of print.)
 Covers the various phases of drycleaning.
- Effect of dry cleaning on silks a comparison of the effect of drycleaning and some service conditions on the strength of silk. M. H. Goldman, C. C. Hubbard, and Charles W. Schoffstall. Tech. Pap. BS 20, 605 (1925-26) Technologic Paper T322. 30 pages. G.P.O., 15 cents.

DRYCLEANING SOLVENTS AND SOAPS

Washing, cleaning, and polishing materials. F. W. Smither. National Bureau of Standards Circular C424. 63 pages (1939). Government Printing Office, Washington, D. C.,

price 15 cents.

Includes brief discussions of drycleaning operations, solvents, drycleaning soaps, stain removal, finishing, reclamation of solvent, elimination of static electricity in drycleaning plants, and carpet and upholstery cleaners. References to literature on drycleaning are given.

- Stoddard Solvent (Drycleaning). Commercial Standard CS3-38. 2nd edition. 21 pages (1938). Government Printing Office, Washington, D. C., price 5 cents. Gives the requirements agreed upon by producers, distributors, and users for a grade of petroleum distil-
- The toxic action of chlorinated hydrocarbons (The risks of poisoning in the manufacture and use of chlorinated

late of low flammability for use in drycleaning.

- hydrocarbons). R. Freitag. Rayon Textile Monthly (303 Fifth Avenue, New York, N. Y.) 18, 543-5 (August 1937).
- Modern soap making. E. G. Thomssen and C. R. Kemp. (MacNair-Dorland Co., Inc., 254 West 31st Street. New York, N. Y.) 541 pages (1937).
 Discusses drycleaning soaps on pages 278-283.
- Methods of increasing the detergent efficiency of drycleaning. C. L. Bird. J. Soc. Dyers & Colourists (303 Fifth Avenue, New York, H. Y.) 52, 456-8 (December 1936).
- Reclaiming chlorinated drycleaning solvents by adsorption. L. E. Stout and A. B. Tillman. Ind. Eng. Chem. (Mills Building, Washington, D. C.) 28, 22-5 (January 1936).

- Chlorinated solvents in drycleaning. P. H. Killeffer. Eng. Chem. (Mills Building, Washington, D. C.) 28, 640-3; Rayon Textile Monthly (303 Fifth Avenue, New York, N. Y.) 17, 796-7 (December 1936).
- Drycleaning soaps and solvents. S. W. Putnam. Soap (MacNair-Dorland Co., Inc., 254 West 31st Street, New York, N. Y.) 12, No. 1, 25 (1936).
- Drycleaning soaps. C. A. Tyler. Soap 12, No. 5, 31 (1936).
- Determination of soap and fatty acids in drycleaning soaps. E. E. Hughes. National Cleaner and Dyer (305 East 45th Street, New York, N. Y.) 24, No. 2, 39 (1933).
- The effect of drycleaning solvents on fabrics. E. E. Hughes and W. D. Appel. Drycleaner (National Association of Dyers and Cleaners, Silver Spring, Md.) 9, No. 5-6, 6-8; 24 (May-June 1932).

A more detailed report of the investigation referred

to in the following reference.

Drycleaning solvents. Bureau of Standards Technical News Bulletin No. 177, pp. 1-4 (January 1932). (Out of print but available in many large libraries.) National Cleaner

and Dyer 23, 39-40 (February 1932).

A summary report of an investigation of the comparative properties of Stoddard Solvent, carbon tetrachloride,

and trichloroethylene as drycleaning solvents.

Technology of purification and simple tests for drycleaning solvents. C. C. Hubbard (Silver Spring, Md.). 93 pages mimeographed (1930).

MANAGEMENT

- Job descriptions for the cleaning, dyeing and pressing industry. Prepared by the Job Analysis and Information Section, Division of Standards and Research (U. S. Department of Labor). 344 pages (October 1938). Government Printing Office, Washington, D. C., price \$1.00.
- Production in the finishing department. E. C. Bergendahl. Bulletin Service No. N27. (National Association of Dyers and Cleaners, Silver Spring, Md.) (September 1937). Reports rate studies on number of garments finished per hour.

Bookkeeping and costfinding for drycleaners. Walter H. Franks. (National Association of Dyers and Cleaners, Silver Spring, Md.) 211 pages (1931).

SAFETY

- Safety in drycleaning and dyeing establishments. Industrial Safety Series. Industrial Safety Council (108 East Olive Street, Chicago, Ill.)
- Home drycleaning fires. Quarterly National Fire Protection Association (60 Batterymarch, Boston, Mass.) (April 1932).

TRADE JOURNALS

American Drycleaner, 620 North Michigan Avenue, Chicago, Illinois.

Cleaning and Laundry World, 972 Lexington Avenue, New York, New York.

The National Cleaner and Dyer, 305 East 45th Street, New York, New York.

Soap and Sanitary Chemicals, 254 West 31st Street, New York, New York.