

Technical Purchase Description (TPD) for Carpet Cleaners

1. Scope

This technical purchase description (TPD) covers commercially available cleaning compound liquid concentrates for cleaning rugs and upholstery.

2. Types

2.1 Liquid concentrate, no sanitizing properties

2.2 Liquid concentrate, with sanitizing properties, shall kill mold, mildew and other fungi.

3. Units of Issue. The carpet cleaner concentrate shall be available in the following units of issue:

3.1 5 gallon container

3.2 4-1 gallon containers/case

(Suggested units of issue. Other units of issue will also be considered and not limited to the units listed below.)

4. Requirements

4.1. Material. The composition of the carpet cleaner concentrate shall be optional with the manufacturer, but shall meet the requirements of this TPD.

4.2 pH. The undiluted carpet cleaner concentrate shall have a pH 7.0-9.6 when tested in accordance with ASTM E70.

4.3 Alcohol Soluble Organic Matter. The carpet cleaner concentrate shall have a range between 6.0% to 15.0 % alcohol soluble organic matter when tested in accordance with ASTM 820.

4.4 Foam Stability. The product shall have a minimum of 200 mL of foam after standing 1 minute, and have a minimum of 150 mL of foam after standing 15 minutes when tested as follows:

Make a 20 grain hard water solution of the product in accordance with the use dilution ratio recommended on the product label. Place 50 mL of the solution in a 250 mL glass stoppered graduated cylinder. Stopper the cylinder and shake by inversion, for 1 minute. Place the cylinder in an upright position on a table, remove the stopper, wait 1 minute, and read the net column of foam. Measure the foam height again after 15 minutes.

4.5 Color

The product shall not impart any color to the fabric, when tested as follows:

Apply the product to swatches of unbleached, uncolored wool fabric in accordance with manufacturer's instructions on the label. Let the fabric stand for 1 hour and examine visually for any change in the color of the fabric.

4.6 Biodegradability. The carpet cleaner concentrate when diluted in accordance with the manufacturer's label shall be water soluble in fresh water, dilution biodegradable, and readily decomposed by naturally occurring microorganisms. Biodegradability shall be a minimum of 50 % in 23 days when tested in accordance with EPA/OPPTS test guidelines 835.3110 or 835.3120. (Other commercially acceptable test methods may be considered as an alternate. If historic documentation for the biodegradability test is available for the individual components of the product formulation, this information will also be accepted in lieu of the specified cleaning product).

4.7 Aquatic Toxicity

The product shall not be toxic to aquatic life as measured by test methods found in 40 CFR Part 797, Subpart B, and as determined by meeting the following three criteria for acute (Daphnia or fish), acute (algae), and chronic (Daphnia) effects:

Acute: EC50 Daphnia (48 hr.) > 10 mg/L; or LC50 fish (96 hr.) > 10 mg/L

Acute: EC50 algae (96 hr.) > 10 mg/L

Chronic: EC50 Daphnia (21-day or > 10 mg/L 15-day minimum).

4.8 EPA Registration

The carpet cleaner concentrate, type 2, shall be registered with the Environmental Protection Agency as a sanitizer in accordance with 40 CFR 162, Regulations for the Enforcement of the Federal or bacteriostat Insecticide, Fungicide and rodenticide.

4.9 Prohibited Materials

4.9.1 Carcinogens and Toxins

The materials used in the carpet cleaner shall not contain any known or suspected human carcinogens in concentrations equal to or greater than 0.1% (by weight) as defined in: Code of Federal Regulations 29 CFR 1910.1000 Series, Occupational Safety and Health Administration (OSHA) Subpart Z Regulated Carcinogens/Toxic and Hazardous Substance List (latest edition); International Agency for Research on Cancer (IARC) Groups 1, 2A, and 2B (latest edition); and the latest annual report of the National Toxicology Program's (NTP) of Known to be Human Carcinogens, and Reasonably Anticipated to be Human Carcinogens.

4.9.2 Reproductive Hazards

The materials used in the carpet cleaner shall not contain the following occupational reproductive hazardous chemicals if used in concentrations equal to or greater than 0.1 percent (by weight): acetohydroxamic acid, aminopterin, arsenic, benomyl, benzene, bromoxynil, cadmium, carbon disulfide, carbon monoxide,

chlordecone, cyanazine, cycloheximide, cyhexatin, dinocap, dinoseb, 1,2-dibromo-3-chloropropane, m-dinitrobenzene, o-dinitrobenzene, p-dinitrobenzene, epichlorohydrin, ethylene glycol monoethyl ether, ethylene glycol monoethyl ether acetate, ethylene glycol monomethyl ether, ethylene monomethyl ether acetate, ethylene oxide, hexachlorobenzene, hydroxurea, lead, mercury and mercury compounds, methyl bromide, methyl mercury, nickel carbonyl, polybrominated biphenyls, polychlorinated biphenyls, 2,3,7,8-tetrachloro-dibenzo-para-dioxin, toluene, and warfarin and any other chemical species listed in OPNAVINST 5100.23, Chapter 29, Appendix 29-B. The most current version of the instruction can be obtained from the internet website: <http://www.navosh.net>.

4.10 Hazardous Waste. The carpet cleaner shall not be classified as a hazardous waste in accordance with 29 CFR 1910.1200.

4.11 Volatile Organic Compounds (VOCs). VOC levels of the product must be stated as a % of VOCs by weight when prepared in the dilution ratio as directed on the manufacturer's label and shall not exceed 10% in accordance with 40 CFR parts 9 and 59.

4.12 Shelf Life. The carpet cleaner concentrate shall have a minimum shelf life of 36 months.

5. Preferable Characteristics. The carpet cleaner concentrates not containing the chemicals listed below will be favored over products that do contain them. The acceptance of products that contain these chemicals for shipboard application will be dependent on the amount present in the listed formulation. Acceptance of the cleaner will be determined on a case-by-case basis.

5.1 Alkyl Phenyl Ethoxylates (APE's).

5.2 Dyes and Fragrances - Undesirable and unnecessary dyes and fragrances.

6. Regulatory Requirements

6.1 Material Safety Data Sheets (MSDSs). The contracting activity shall be provided a material safety data sheet with each contract bid/proposal or prior to contract award. The MSDS shall be provided in accordance with the requirements of FED-STD-313 and 29 CFR 1910.1200, Hazardous Communication Standard. The MSDS shall be included with each shipment of the material covered by this TPD. The MSDS must be the most current version for the product.

6.2 Environmental Considerations. The product delivered under this TPD shall be in accordance with the environmental requirements of 40 CFR.

6.3 Recycling. The contractor is encouraged to use recovered materials in accordance with Public Law 94-580 to the maximum extent practicable.

7. Quality Assurance Provisions

7.1 Contractor Certification

The product provided shall meet the TPD requirements and conform to the producer's own drawings, specifications, standards, and quality assurance practices and be the same product offered for sale in the commercial market. The Government reserves the right to require proof of such conformance.

7.2 Market Acceptability. The following market acceptability criteria are necessary to document the quality of the product to be provided under this TPD:

- a) The company furnishing the carpet cleaner must have been producing a product meeting the requirements of this technical purchase description for at least 6 months.
- b) The Government reserves the right to require proof of such conformance.

8. Preparation for Delivery

The item(s) shall be packaged and packed in accordance with the latest revision of ASTM D 3951, Standard Practice for Commercial Packaging unless otherwise specified in the contract.

9. Source of Documents

9.1 Copies of ASTM test methods should be addressed to the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 www.astm.org

9.2 Copies of the Code of Federal Regulations (CFR) and Federal Acquisition Regulation (FAR) may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Website: HYPERLINK <http://www.access.gpo.gov/nara/cfr/cfr-table-sarch.html>.

9.3 Copies of all IARC publications are available directly from IARC Press, 150 Cours Albert Thomas, F-69372 Lyon cedex 08, France (Fax: +33 4 72 73 83 02; E-mail press@iarc.fr).

9.4 Copies of the most recent Annual Report on Carcinogens may be obtained from the U.S. Department of Health and Human Services, Public Health Service, National Toxicology Program, P.O. Box 12233, Research Triangle Park, NC 27709. Website: HYPERLINK <http://ntp-server.niehs.nih.gov/NewHomeRoc/AboutRoC.html>