

Technical Purchase Description (TPD) For Waterless Hand Cleaner

1. Scope

This technical purchase description (TPD) covers commercially available waterless hand cleaner products, for use in removing grease and industrial soils from the hand, and an antimicrobial¹ hand cleaner. This TPD only covers the cleaner and cleaner refills. The soap as provided by an individual manufacturer will be used with that manufacturer's hand soap dispensing system.

2. Classification.

The product shall be of the following classes and types:

Class 1-Cream/Gel

Type 1 – Regular

Type 2 – Antimicrobial

Class 2- Lotion

3. Units of Issue

The waterless hand cleaner shall be available in the following units of issue:

Class 1 (Type 1 and Type 2)

One (1) pound container

One (1) 5 pound container

Class 2

1. One (1) pint container

2. Box of four (4) 1-gallon containers

(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 waterless hand cleaner shall be optional with the manufacturer, but shall meet the requirements of this TPD. The waterless hand cleaner shall be ready to use in the contract manufacturer's soap dispenser system.

¹ The terms "antiseptic, antimicrobial and antibacterial" are included under the term "antimicrobial" soaps .

4.2 Finished product

The waterless hand cleaner shall be uniform solution, free of sediment and foreign materials. The waterless cleaner should be non-toxic and non-hazardous to human health. The cleaner should not cause irritation to human skin. The addition of fragrance to the waterless hand cleaner is optional.

4.2.1 pH

The pH of the waterless hand cleaner shall be determined as specified in ASTM E 70, on a 1% solution of the concentrated product mixed with distilled water. The pH shall be in the range of 4.5 to 10.3.

4.2.2 Heat Stability

During heating at 38°C (100.4°F) for 72 hours, the hand cleaner shall not separate, change color, or turn rancid.

4.2.3 Freeze-thaw Stability

During three cycles of freezing at -10°C (14°F) for 16 hours and thawing at 22°C (71.6°F) for 8 hours, the hand cleaner shall not separate into components.

4.2.4 Antimicrobial activity

When antimicrobial hand cleaner is specified (Class 1, Type 2), a 25 percent by weight suspension of the hand cleaner in distilled water shall inhibit the growth of *Staphylococcus aureus* (ATCC 6538), *Salmonella typhi* (ATCC 6539) and *Trichophyton mentagrophytes* (ATCC 9533). The hand cleaner must be registered with the FDA as an antimicrobial/antibacterial cleaner in accordance with the Federal Food, Drug and Cosmetic Act.

4.2.5 Cleaning Efficiency

The cleaning efficiency of the hand cleaner shall be determined by test comparisons with two other waterless hand cleaners from other manufacturers. The hand cleaner shall remove at least 80% of soil from the palm of the hand, except for soil that is embedded in creases of the skin.

Standard test soils: black shoe polish paste

Procedure: Uniformly mark palm of hand with above soiling media. Wait for 1 minute, then clean the soiled area with hand cleaner. After drying, the hand shall be free from any visible, sticky or gritty residue left from the nonvolatile matter of the cleaning solution.

4.3. Prohibited Materials

4.3.1 Carcinogens

The materials used in the waterless hand 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.

4.3.2 Reproductive Hazards

The materials used in the waterless hand 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>.

4.3.3 Antimicrobial Additives

The following materials should not be present in the antimicrobial waterless hand cleaner in accordance with International Sanitary Supply Association (ISSA) Guide To The Regulation Of Antibacterial Hand Soaps: Chlorhexidine gluconate, Florosalan, Hexachlorophene, Iodine Tincture U.S.P., Iodine Topical Solution U.S.P., Mercufenol chloride, Phenol (greater than 1.5 percent), and Tribromsalan, Calomel, oxyquinoline, benzoate, triethanolamine, and phenol derivative; Mercufenol chloride and secondary amyltricrosols in 50 percent alcohol, and Triple Dye.

4.4 Hazardous Waste

The waterless hand cleaner shall not be classified as a hazardous waste in accordance with 29 CFR 1910.1200.

4.5 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.

4.6 Shelf Life. The hand cleaner shall have a minimum shelf life of 36 months.

5. Regulatory Requirements.

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

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

6. Quality Assurance Provisions

6.1 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.

6.2 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 hand 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.

6.3 Product Conformance

The hand cleaner shall comply with the Federal Food, Drug and Cosmetic Act and regulations published under the Act (21 CFR 1 Regulations for the Enforcement of the Federal Food, Drug and Cosmetic Act).

7. 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.

8. Sources for Documents

8.1 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>.

8.2 Copies of all IARC publications may be obtained 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).

8.3 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>

8.4 Copies of ASTM test methods may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 www.astm.org

8.5 Copies of EPA/OPPTS test methods may be obtained directly from EPA website: www.epa.gov/opptsfrs/home/opptsim.htm.

8.6 Copies of Public Law 94-580 “Resource Conservation & Recovery Act” (RCRA) may be obtained from Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

8.7 Copies of Federal and Military Standards may be obtained from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094. Website: <http://www.dodssp.daps.mil>.

8.8 Copies of the ISSA’S Guide To The Regulation Of Antibacterial Hand Soaps may be obtained from the International Sanitary Supply Association, 7373 N. Lincoln Ave., Lincolnwood, IL 60712-1799 . Copies of the standard can also be obtained from the International Sanitary Supply Association Resources section in the Reference Library under Antibacterial Handsoaps. Website: http://www.issa.com/legislative/legi_frame.html