

Technical Purchase Description (TPD) for Silver-Cleaner Tarnish Preventive

1. Scope

This technical purchase description (TPD) covers commercially available silver polish-cleaner tarnish preventive, for use on sterling silver and silver-plated articles.

2. Units of Issue

The metal polish shall be available in the following units of issue:

- 1) 1 – 8 oz bottle
- 2) 1 – 16 oz container

(Suggested units of issue. Other units of issue will also be considered.)

3. Requirements

3.1 Material

The silver polish shall be a liquid containing a finely divided abrasive suitable for polishing silver and containing tarnish preventive material that remains on the silver after polishing.

3.2 pH

The polish shall have a pH of not less than 5.0 when tested in accordance with ASTM-E-70.

3.3 Flammability

The polish shall have a flash point of not less than 140°F (60°C) when tested in accordance with ASTM-D-92.

3.4 Cleaning Efficiency

The cleaning efficiency of the polish shall be determined by test comparisons with two other silver polishes from other manufacturers. The polish shall have a cleaning efficiency greater than 85 percent when tested using the following method:

- a. Tarnish 6 silver panels by immersion in saturated potassium sulfide solution.
- b. Apply 5 mL of polishing solution on one tarnished panel and stroke 2 minutes. Repeat one more time with panel 2. Visually inspect the panels and estimate percent tarnish removed. Calculate average percent of tarnish removed.
- c. Repeat above procedure with two other manufacturers' silver polish cleaners. Report average cleaning efficiency results for all three cleaners.

3.5 Prohibited Components

3.5.1 Carcinogens and Toxins

The materials used in the silver polish 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.

3.5.2 Reproductive Hazards

The materials used in the silver polish 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 glycol 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>.

3.6 Hazardous Waste

The silver polish shall not be classified as a hazardous waste in accordance with 29 CFR 1910.1200.

3.7 Storage Stability

The polish shall show no visible evidence of deterioration after storage in ambient conditions for six months.

3.8 Material Safety Data Sheets (MSDS)

MSDS's shall be furnished in accordance with FED-STD-313. The pertinent Government mailing addresses for submission of data are listed in Appendix B of FED-STD-313.

4. Regulatory Requirements

The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal

Acquisition Regulation (FAR).

5. Product Conformance

5.1 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.

5.2 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. Source of Documents

6.1 Requests for 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. Website: <http://www.astm.org>

6.2 The FAR may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington DC 20402-0001.

6.3 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).

6.4 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>

6.5 Federal Standards and Specifications may be obtained from the General Services Administration Specifications Section, Suite 8100, 470 E. L'Enfant Plaza, SW, Washington, DC.