

P-H-31E

February 28, 1975

SUPERSEDING

Int. Fed. Spec. P-H-0031D(GSA-FSS)

December 19, 1968, and

Fed. Spec. P-H-31A

April 10, 1962

## FEDERAL SPECIFICATION

## HAND CLEANER, WATERLESS (DUPLICATING INK AND GREASE)

This specification was approved by the Commissioner, Federal Supply Service, General Service Administration, for the use of all Federal agencies.

## 1. SCOPE AND CLASSIFICATION

1.1 Scope. This specification covers two classes of waterless hand cleaner which may be used with or without a water rinse (see 6.1).

1.2 Classification. The hand cleaner shall be of the following classes and grades as specified (see 6.2).

Class 1 - Lotion.

Class 2 - Cream.

Grade A. - Regular.

Grade B. - Antimicrobial.

## 2. APPLICABLE DOCUMENT

2.1 The following documents, of the issues in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein.

Federal Specifications

L-P-378	- Plastic Sheet and Strip, Thin Gauge, Polyolefin.
P-S-620	- Soap, Toilet (Cake and Powdered).
UU-T-591	- Towels, Paper.
FFF-D-191	- Dentifrice.
PPP-B-566	- Boxes, Folding, Paperboard.
PPP-B-636	- Boxes, Shipping, Fiberboard.
PPP-C-96	- Cans, Metal, 28-Gage and Lighter.
PPP-F-320	- Fiberboard, Corrugated and Solid, Sheet Stock (Container Grade), and Cut Shapes.

Federal Standard

Fed. Std. No. 123 - Marking for Domestic Shipment (Civil Agencies).

(Activities outside the Federal Government may obtain copies of Federal Specifications, Standards, and Handbooks as outlined under General Information in the Index of Federal Specifications and Standards and at the prices indicated in the Index. The Index, which includes cumulative monthly supplements as issued, is for sale on a subscription basis by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

(Single copies of this specification and other Federal Specifications required by activities outside the Federal Government for bidding purposes are available without charge from Business Service Centers at the General Services Administration Regional Offices in Boston, New York, Washington, DC, Atlanta, Chicago, Kansas City, MO, Forth Worth, Denver, San Francisco, Los Angeles, and Seattle, WA.

(Federal Government activities may obtain copies of Federal Specifications, Standards, and Handbooks and the Index of Federal Specifications and Standards from established distribution points in their agencies).

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Military Standards

- MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes.  
 MIL-STD-129 - Marking for Shipment and Storage.

(Copies of Military Specifications and Standards required by suppliers in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

Laws and Regulations

- 21 CFR 1 - Federal Food, Drug and Cosmetic Act.

(The Code of Federal Regulations (CFR) and the Federal Register (FR) are for sale on a subscription basis by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. When indicated, reprints of certain regulations may be obtained from the Federal agency responsible for issuance thereof.)

2.2 Other publications. The following documents form a part of this specification to the extent specified herein. Unless a specific issue is identified, the issue in effect on date of invitation for bids or request for proposal shall apply.

American Society for Testing and Materials (ASTM) Standards.

- D 5 - Test for Penetration of Bituminous Materials.  
 D 36 - Test for Softening Point of Asphalts and Tar Pitches (Ring and Ball Apparatus).  
 D 800 - Chemical Analysis of Industrial Metal Cleaning Compounds.  
 D 1437 - Test for Flash Point of Solvent-Type Liquid Waxes.  
 E 70 - pH of Aqueous Solutions with the Glass Electrode.

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.)

American Type Culture Collection (ATCC)

Catalog of Strains.

(Application for copies should be addressed to the American Type Culture Collection, 12301 Parklawn Drive, Rockville, MD 20852.)

National Motor Freight Traffic Association, Inc., Agent.

National Motor Freight Classification.

(Application for copies should be addressed to the American Trucking Associations, Inc., Tariff Order Section, 1616 P Street, N.W., Washington, DC 20036.)

Uniform Classification Committee, Agent

Uniform Freight Classification.

(Application for copies should be addressed to the Uniform Classification Committee, Room 1106, 222 South Riverside Plaza, Chicago, IL 60606.)

## 3. REQUIREMENTS

3.1 Materials. The detergents, solvents, skin conditioning and other ingredients used in the manufacture of hand cleaner shall be of commercial grade or superior. All nonvolatile ingredients of the hand cleaner shall not be irritating to the human skin.

3.1.1 Solvent of class 2, grade B hand cleaner. The solvent of class 2, grade B hand cleaner shall be composed of pure alkylhydrocarbons and/or of mineral oils of the U.S.P., N.F. or technical grade.

3.2 Prohibited materials. The hand cleaner shall not contain halogenated hydrocarbon solvents, free ammonia, free alkali, grit or abrasives.

3.3 Finished product. The finished product shall be a smooth textured, stable, homogenous material suitable for use on the human skin. The finished product shall conform to the physical and chemical requirements of table I.

Table I. Physical and chemical requirements

Property	Class I		Class II	
	minimum	maximum	minimum	maximum
ph of 5 percent by weight solution	4.5	10.3	4.5	10.3
Viscosity (centipoise) at time of receipt by the Government	4,000	160,000	400,000	2,500,000
Flash point	40°C(104°F)	-----	40°C(104°F)	-----

3.4 Thermal stability. The hand cleaner shall remain smooth-textured and shall show no significant separation, rancidity, darkening of color or loss of effectiveness after being subjected to one freeze-thaw, heating-cooling cycle as specified in 4.3.1.

3.5 Dermal irritation. The hand cleaner shall not irritate the skin when tested as specified in 4.3.6.

3.6 Odor. The hand cleaner shall be odorless or lightly scented, free of strong or rancid odors or odors characteristic of kerosene or similar petroleum products. The hand cleaner shall not leave any objectionable odor on the hands 10 minutes after use and removal by wiping with paper towels.

3.7 Performance. The hand cleaner, when tested in accordance with 4.3.6, shall completely remove the test soil in not more than 120 seconds.

3.8 In vitro bacteriostatic and fungistatic activity. Class 2, grade B hand cleaner shall inhibit the growth of the following micro-organisms when tested as specified in 4.3.7.

1. Staphylococcus aureus (FDA 209, ATCC 6538).
2. Trichophyton interdigitale (Strain 640, ATCC 9533).
3. Salmonella typhosa (ATCC 6539).

The testing shall be performed in a testing facility acceptable to the procuring agency, and a copy of the test results shall accompany the certificate of compliance.

3.9 Federal Food, Drug, and Cosmetic Act. The hand cleaner, packaging and labeling shall comply in every respect with The Federal Food, Drug and Cosmetic Act, and regulations promulgated thereunder.

3.10 Shelf life. The hand cleaner shall not cause deterioration in the unit container, separate into components, become rancid or deteriorate in cleaning ability when stored under general warehouse conditions at temperatures between 0°F to 104°F for a period of one year from the time of receipt by the Government.

3.11 Unit container fill uniformity. The net contents of each unit container shall not vary more than 2 percent from the average unit container net contents for the lot.

3.12 Certificate of compliance. The manufacturer shall furnish a certificate of compliance stating that his product complies with the requirements of 3.1, 3.1.1, 3.2, 3.9 and 3.10. For class 2, grade B hand cleaner, the manufacturer shall also certify that his product meets the requirement of 3.8.

#### 4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or order, the supplier may utilize his own facilities or any commercial laboratory acceptable to the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure that supplies and services conform to prescribed requirements.

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4.1.1 Certificates of compliance. Where certificates of compliance are submitted, the Government reserves the right to check test such items to determine the validity of certification (see 4.3.8).

#### 4.2 Quality conformance inspection.

4.2.1 Inspection of the end item. In accordance with 4.1 above, the end item shall be inspected and tested in accordance with all the requirements of referenced specifications, drawings and standards unless otherwise excluded, amended, or qualified in this specification or applicable purchase documents.

4.2.2 Examination of preparation for delivery Packaging, packing and marking shall be inspected to determine compliance with the requirements of section 5. Defects shall be scored in accordance with table II. The sample unit shall be one shipping container fully prepared for delivery. The lot shall consist of all shipping containers presented for delivery at one time. Sampling and acceptance shall be in accordance with MIL-STD-105, inspection level S-2, Acceptable Quality Level (AQL) of 4.0 percent defective.

Table II. Examination of preparation for delivery.

Examine	Defect
Contents	Not as specified.
Containers	Not as specified.
Marking	Omitted, incorrect, illegible, improper size, location, sequence or method of application.
Materials	Component missing or damaged.
Workmanship	Bulging or distortion of containers. Cushioning inadequate, improper or missing.

4.2.2.1 Examination of closure, waterproofing and banding of shipping containers. When shipping containers are required to comply with PPP-B-636, examination for defects in closure, waterproofing and banding shall be in accordance with the appendix of that specification.

4.2.3 Examination of the end item. The end item shall be examined for defects as specified in table III. The sample unit shall be one unit container of hand cleaner. The lot shall consist of all hand cleaner of one class and grade made during one 24 hour period under the same processing conditions, made with the same raw material lots and packaged in unit containers of the same type and container fill. Sampling and acceptance shall be in accordance with MIL-STD-105, inspection level S-4, AQL of 4.0 percent defective. A panel of at least five people shall be used to judge the visual and olfactory characteristics specified in table III, and the majority opinion shall determine presence or absence of such defects.

Table III. Examination of the end item

Examine	Defect
Unit container contents	Not smooth textured. Not homogeneous. Contents rancid.
Odor	Strong, objectionable, or rancid odor. Odor of kerosene, similar petroleum products, or ammonia.
Net contents	Less than specified. Unit container net contents more than 2 percent higher or lower than average unit container net contents for lot.

4.2.4 Testing of the end item. The end item shall be tested as specified in table IV. The sample unit shall be 2 unit containers. The lot shall consist of all hand cleaner of one class and grade made during one 24 hour period under the same processing conditions, made with the same raw material lots and packaged in unit containers of the same type and container fill. Sampling shall be in accordance with MIL-STD-105, inspection level S-1. Failure of any sample unit to pass any of the specified tests shall be cause for rejection of the lot. In case of failure, report description of failure or numerical point of failure, as applicable.

Table IV. Instructions for testing the end item

Property	Specification reference		Results reported	
	Requirement	Test Method	pass/fail	numerically to nearest
Thermal stability	3.4	4.3.1	X	
pH	Table I	4.3.2		0.1 pH unit
Flash point	Table I	4.3.3		1 degree C
Viscosity	Table I	4.3.4		100 centipoise
Performance	3.7	4.3.5		1 second

#### 4.3 Test Methods.

4.3.1 Thermal stability. Place the unopened unit container of hand cleaner in a cold chamber maintained at  $-10^{\circ} \pm 2^{\circ}\text{C}$ . After 24 hours, remove the unit container from the cold chamber and allow to stand at room temperature ( $21^{\circ}$  to  $27^{\circ}\text{C}$ ) for 24 to 72 hours. Place the unit container in an oven maintained at  $50^{\circ} \pm 2^{\circ}\text{C}$  for 24 hours. Remove the unit container from the oven and allow to stand at room temperature for 18 to 24 hours. Open unit container and examine contents. A panel of at least five people shall make the examination and the majority opinion shall determine presence or absence of defects. There shall be no significant separation of components, no rancid odor or evidence of rancidity, no darkening of color and no deterioration of container. When several samples are to be tested at the same time, increase the times in the cold chamber and oven to 72 hours or until the hand cleaner has thoroughly equilibrated at the temperature of the cold chamber or oven. Test performance as specified in 4.3.5.

4.3.2 pH. Dissolve 5 grams of hand cleaner in approximately 75 ml. of cool, recently boiled, distilled water. Add distilled water to make a final volume of 100 ml. Mix thoroughly. Determine the pH of the solution in accordance with ASTM Method E70.

4.3.3 Flash point. Determine the flash point in accordance with ASTM method D 1437.

#### 4.3.4 Viscosity.

4.3.4.1 Class 1 lotion hand cleaner. Fill a 600 cc low form Griffin beaker with an undiluted sample of the lotion hand cleaner. Allow to settle for at least one hour. Determine the viscosity in centipoise at  $25.0^{\circ}\text{C} \pm 1^{\circ}\text{C}$  with a Brookfield Viscometer Model RVT (Brookville Engineering Laboratories, Inc., Stoughton, MA), or equal. Use spindle numbers 2 through 5, and operate at 2.5 r.p.m. Make three determinations and report the individual values and the average.

4.3.4.2 Class 2 cream hand cleaner. Fill a 600 cc low form Griffin beaker with the cream hand cleaner. Firmly pack the hand cleaner into the beaker avoiding air bubbles and allow to settle for at least an hour. Determine the viscosity at  $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$ . with a Brookfield Viscometer, Model RVT, and the Helipath stand. Use a T bar E spindle. Operate at 4.0 r.p.m. Make three determinations and report the individual values and the average.

4.3.5 Performance. Evaluate the cleaning effectiveness of the hand cleaner by soiling the hands with an asphalt compound and by observing the time required for the cleaner to start dissolving the asphalt and the time required for it to remove the soil.

4.3.5.1 Asphalt soiling medium. The soiling medium used in the performance test shall be a commercial petroleum asphalt, such as Standard Oil of Indiana Korite No. 1 having the following characteristics

Softening point (ASTM Method D36) °F	170 to 195
Penetration (ASTM Method D5) at 77°F	25 to 85
Solubility in carbon tetrachloride, min. %	98

This material is solid at room temperature but can be molded into shape if warmed a few degrees. Take 5 to 10 g of the asphalt compound and warm by holding in the hand. When sufficiently warm and pliable mold it into the shape of a rod 1/2 to 3/8 in. (6.4 to 9.5 mm) in diameter.

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4.3.5.2 Cleaning performance test. A panel of at least five people, one of whom may perform the test, shall observe the test and agree on the "complete removal" time and on the quality of the odor remaining on the hands. Use hand cleaner that has completely reached room temperature ( $23^{\circ} \pm 2^{\circ}\text{C}$ ). Wash the hands with a toilet soap conforming to P-S-620, rinse thoroughly with water, and dry the hands thoroughly with paper towels. Wait 10 to 15 minutes before proceeding with the test. Do not handle anything while waiting.

Moisten the asphalt rod formed above by dipping the rod into inhibited 1,1,1-trichloroethane. Using the moistened end, smear on the palm of each hand a thin, uniform layer of asphalt approximately 30 mm in diameter. Allow to dry for 5 minutes. Using a spatula or spoon, weight out 2.5 grams of hand cleaner and transfer it to the palm of the left hand.

Start a stop watch, place the palms together and using light pressure, rub the hands together in a circular motion. After the hand cleaner starts to attack the asphalt strongly, rub the soiled spots with a light pressure with the fingers and thumbs to free the pores of the skin from the residual soil. Record the time at which the soil is completely removed (asphalt is dispersed and the spots are not discernible). Wipe the hand cleaner off the hands with paper towels. Repeat the test (from the first sentence in 4.3.5.2) for a total of three times. Average the results. After the final test, wipe the hand cleaner off the hands with paper towels. The odor on the hands shall not be objectionable immediately after the hand cleaner is wiped off and 10 minutes after the hand cleaner is wiped off. There shall be no evidence of grit or abrasives in the hand cleaner.

4.3.6 Dermal irritation test. The test shall be performed by at least six persons, some of whom shall be men, some of whom shall be women, some of whom shall be clerical workers, some of whom shall be warehouse workers, and some of whom shall be mechanics or shop workers. The hands of the subjects shall not be cut or abraded. Each subject shall work the hand cleaner thoroughly into the hands for two minutes and then remove the hand cleaner by wiping. This shall be done three times within the period of one hour. The hands shall not be washed until two hours after the last application of hand cleaner. No subject's hands shall be irritated, inflamed or otherwise injured by the hand cleaner. The hands of each subject shall be examined immediately after, 2 hours after, 24 hours after, and 48 hours after the test.

4.3.7 Bacteriostatic and fungistatic tests. The micro-organisms used are those in

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4.3.7.1 Bacterial cultures. The cultures of bacteria are maintained on trypticase soy agar (Baltimore Biological Laboratory (BBL)) slants (pH 7.2) transferred at intervals not exceeding one every ten days, and stored in the refrigerator at  $6^{\circ}$  to  $10^{\circ}\text{C}$ . Three successive sub-cultures are made at twenty-four hour intervals into trypticase soy broth and incubated at  $37^{\circ} \pm 1^{\circ}\text{C}$ . The last sub-culture is used in the bacteriostatic tests.

4.3.7.2 Fungi. Fungi are maintained on Sabouraud's dextrose (4 percent) agar (Difco Laboratories) slants (pH 5.6 to 5.8) incubated at room temperature and stored in the refrigerator. Conidia suspensions for fungistatic testing are prepared in the following manner. Sabouraud's dextrose (2 percent) broth is added to 4 mm solid glass beads, contained in a BBL blood culture bottle so that when laying on its side, the fluid medium leaves the radius of the uppermost layer of beads exposed. The bottles are stoppered with gauze covered cotton plugs and sterilized by autoclaving at  $121^{\circ}\text{C}$  for fifteen minutes. Inoculation is performed with either mycelial elements of hyphae and their associated conidia, depending upon the type fungus being employed, and incubated at room temperature. Usually ten days is adequate for obtaining confluent fungal growth over the surface of the exposed beads. The plug is then replaced with a sterile solid rubber stopper held in place with a screw cap and the bottle shaken in the horizontal position on a standard Kahn shaker at 275 - 285 cycles/min. with a displacement of one and one-half inches for a period of four to six hours to produce a homogeneous suspension of finely fragmented fungus growth. This suspension is filtered through sterile cotton layered on sterile gauze so that the filtrate consists only of conidia. A count is made of the conidia by using a Thoma erythrocyte dilution pipet and the stock suspension is diluted with sterile physiological saline solution to give an inoculation suspension of conidia containing five million per milliliter. These suspensions are stored in the refrigerator for use in the fungistatic tests for periods not exceeding one month.

4.3.7.3 Culture plates and media. The static testing is performed on agar-solidified media poured into sterile plastic Petri dishes. Each plate is prepared so that one-half contains the standard medium and the other half the same medium plus 25 percent of the hand cleaner. Add hand cleaner after sterilized medium has cooled to 50 degrees C.

The medium to which the hand cleaner is added is compounded so that after the dilution with the hand cleaner, the concentration of the components (except for hand cleaner) is the same on both sides of the Petri dishes. The media is prepared 500 ml per liter flask and sterilized in the autoclave at 15 pounds per square inch pressure and 121°C. for 20 minutes. Initially, the plates are poured with 20 milliliters of the base medium, at a temperature of  $46^{\circ} \pm 0.1^{\circ}\text{C}$ . After complete cooling and solidification, a line is drawn completely through the agar at the maximum diameter of the plate using a sterile stainless steel spatula. One-half of the agar is discarded by holding the plate in the vertical position while teasing the agar away from the Petri dish with the spatula at the uppermost peripheral point adjacent to the line previously drawn through the agar. This one-half empty plate is then filled with the medium containing the hand cleaner maintained in the liquid state at  $46^{\circ} \pm 1^{\circ}\text{C}$ . so that the depths of the media in the two halves are equal. After solidification, if the plates are not to be used immediately, they are stored inverted in the refrigerator ( $6^{\circ}$  to  $10^{\circ}\text{C}$ .).

4.3.7.4 Inoculation of culture plates. In the performance of the test, the plates are inoculated at room temperature. The inoculum is either a twenty-four hour culture of the bacteria or a conidial suspension of the fungus as previously described. A standard four millimeter nichrome loopful of the inoculum is drawn across the diameter of the plate in a straight line perpendicular to the line joining the two media so that each organism is inoculated on both the base medium and that containing the hand cleaner.

The direction is always the plain side to the hand cleaner containing side so that no hand cleaner containing agar is transferred to the standard base medium. A maximum of two organisms are employed per plate. Incubation is at  $37^{\circ} \pm 0.5^{\circ}\text{C}$ . for the bacterial and room temperature for the fungi for 48 hours or such period required for visible growth in the case of fungi.

Stasis is determined by observing the plates for the location of the microbial growth contained thereon. Insofar as the components of the hand cleaner are free to diffuse across the line between the two media, static activity is considered present only when the growth is inhibited on the surface of the base medium adjacent to the hand cleaner containing medium. The distances of inhibition will vary considerably (i.e., 5 mm to 50 mm) and in those instances when no growth whatsoever is observed on the plate the initial inoculum so streaked across the surface of the plate containing only base medium free of the hand cleaner so that viability and the ability of the medium to support growth are confirmed.

4.3.8 Additional test methods. If there are indications that the requirements of 3.2 or 3.5 are not being met, the following test methods shall be used. Free alkali shall be tested for by ASTM Method D 800, sections 56-58. Grit and abrasives shall be tested for in accordance with the test for grit and abrasives in Federal Specification FFF-D-191, Dentifrice. Halogenated hydrocarbon solvents shall be tested for by treating the distilled solvent fraction of the hand cleaner with alcoholic silver nitrate solution. Dermal irritation shall be tested for by any method provided for under the Federal Food, Drug and Cosmetic Act, and regulations promulgated thereunder.

## 5. PREPARATION FOR DELIVERY

5.1 Packaging. Packaging shall be level A, B, or C as specified (see 6.2).

5.1.1 Levels A and B. Hand cleaner of the class and grade specified shall be packaged in accordance with table V, (see 6.2).

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Table V. Unit Container Requirements and  
Number of Unit Containers per Shipping Container

Class	Grade	Container Fill	Unit Container requirement paragraph	Number of unit containers per shipping container
1		16 fl oz*	5.1.1.2	24
1		128 fl oz	5.1.1.2 or 5.1.1.5.1	6
2	B	4.4 + 0.5 oz av**	5.1.1.1	36
2	B	8.9 + 1.0 oz av	5.1.1.1	24
2	A and B	14.2 + 2.0 oz av	5.1.1.3, 5.1.1.5.2, or 5.1.1.6	24
2	B	19.5 + 2.3 oz av	5.1.1.1	24
2	B	28.4 + 3.4 oz av	5.1.1.4	12
2	A	113.5 + 13.3 oz av	5.1.1.5.4	4
2	B	113.5 + 13.3 oz av	5.1.1.3 or 5.1.1.5.2	6

\* Fluid ounces, \*\* ounces avoirdupois

5.1.1.1 Plastic or metal tube. The tube shall be the squeeze-to-use type with standard neck and neck orifice of sufficient diameter to permit ease in dispensing. The tube shall have a plastic screw cap or a plastic dispensing closure.

5.1.1.2 Plastic bottle. The plastic bottle shall be of medium density polyethylene with a narrow mouth and either a screw cap closure or a plastic dispensing closure.

5.1.1.3 Plastic jar. The plastic jar shall be of medium density polyethylene with a wide mouth and either a plastic screw cap closure or a metal screw cap closure.

5.1.1.4 Plastic bag. The plastic bag shall be of plastic conforming to L-P-378 with wall thickness of not less than 0.004 inch. When the bag is heat-sealed, the seam strength shall conform to table I of L-P-378. Alternatively, the plastic bag shall be of polyester-polyethylene laminate having a wall thickness not less than 0.0025 inch. The plastic bag shall be closed by a heat or electronic sealing device, metal clip or similar mechanical closure.

5.1.1.5 Metal can. The metal can shall conform to one of the following descriptions.

5.1.1.5.1 The metal can shall conform to PPP-C-96, type V, class 4, with plan A exterior nonmetallic coating.

5.1.1.5.2 The metal can shall conform to PPP-C-96, type V or VI, with plan A exterior nonmetallic coating and slip or threaded covers. The threaded covers shall be knurled to permit easy removal.

5.1.1.5.3 The metal can shall conform to PPP-C-96, type V, class 1 or 2, or type VI with plan A exterior nonmetallic coating.

5.1.1.5.4 The metal can shall be of such diameter that when the rim type cap is removed the can shall fit snugly in a dispenser opening which has an inside diameter of 5-7/8 inches, and a depth of 1-1/4 inches. A can with a rolled bead on the end containing the rim type cap is acceptable, provided the can fits easily in the dispenser to a depth of 1-1/4 inches. The can shall have a provision at the permanently closed end for proper feeding of the material through the dispenser. Each can shall be packaged in a corrugated fiberboard container with suitable cushioning material to permit reshipment by mail.

5.1.1.6 Composite can. The composite can shall be size 401 x 305.5 or size 401 x 308 spirally wound with skived joints. The materials shall be a vinyl slip coat 0.035 inch fiber liner, an 0.00035 inch aluminum foil outside liner, suitable polyvinyl-acetate (PVA) adhesives, and metal ends. One end shall be a minimum 0.009 inch thick aluminum full pull end. The other end shall be a steel end of not less than 70 pounds per base box metal with not less than 0.25 pounds per base box electrolytic tin plate coating. The ends shall be secured to prevent leakage. The can shall have a close-fitting plastic overcap.

5.1.2 Level C. Hand cleaner shall be packed to afford adequate protection against damage during shipment from the supply source to the first receiving agency.

5.2 Packing. Packing shall be level A, B, or C, as specified (see 6.2).

5.2.1 Level A. Hand cleaner, packaged as specified in 5.1, in quantities as specified in table V, shall be packed in a box conforming to PPP-B-636 class weather-resistant, provided with dividers, separators or partitions to form individual cells for each unit container. A pad shall be provided to separate the layers of containers. Dividers, partitions, separators and pads shall be made of fiberboard conforming to PPP-F-320, type CF, class domestic, grade 200. The box shall be closed, waterproofed and banded in accordance with the appendix to the box specification.

5.2.2 Level B. Hand cleaner, packaged as specified in 5.1, in quantities as specified in table V shall be packed in a box conforming to PPP-B-636, class domestic. Dividers, separators, or partitions shall be provided for metal tubes, plastic tubes, bags or bottles to form individual cells for each. Alternatively, each tube, bag or bottle shall be packaged in a box conforming to PPP-B-566. When this is done the separators or partitions specified above are not required. Dividers, separators or partitions are not required for packing plastic jars or metal cans. A fiberboard pad shall be provided to separate layers of composite cans. The box shall be closed in accordance with the appendix to PPP-B-636.

5.2.3 Level C. Hand cleaner in quantities as specified (see 6.2) packaged as specified in 5.1 shall be packed in containers to assure carrier acceptance and safe arrival at destination. Containers shall comply with Uniform Freight Classification Rules or National Motor Freight Classification Rules, as applicable.

5.3 Marking.

5.3.1 Unit containers. In addition to any special markings required by the contract or order, the unit containers shall be marked with the National Stock Number and normal commercial markings to include name or tradename of contents, name or trademark of manufacturer, and volume of contents for class 1 or net weight of contents for class 2 hand cleaners. Alternatively, the unit containers shall be marked in accordance with Fed. Std. No. 123 for civil agencies or MIL-STD-129 for military agencies as specified (see 6.2).

5.3.2 Interior and shipping containers. In addition to any special marking required by the contract or order, marking of the interior containers (as applicable) and exterior shipping containers shall be in accordance with Fed. Std. No. 123 for civil agencies or MIL-STD-129, for military agencies, as applicable (see 6.2).

6. NOTES

6.1 Intended use. The hand cleaner covered by this specification is intended for removing office-type and shop-type soils from the skin by wiping only or by a water rinse.

6.2 Ordering data. Purchasers should select the preferred options permitted herein and include the following information in procurement documents:

- (a) Title, number, and date of this specification.
- (b) Class and grade required (see 1.2).
- (c) Quantity required (see 5.2).
- (d) Type of unit container and container fill required (see 5.1).
- (e) Levels of packaging and packing required (see 5.1 and 5.2).
- (f) Marking document required (see 5.3).

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6.3 Basis of purchase. The basis of purchase of class 1 hand cleaner shall be the price per shipping container. The basis of purchase for class 2 hand cleaner shall be the price per pound of hand cleaner.

6.4 Settlement. For class 2 hand cleaners, settlement shall be made on the basis of the net weight of hand cleaner in the shipment.

MILITARY INTERESTS.

CIVIL AGENCY COORDINATING ACTIVITIES.

User Activity

Army - GL

CPSC  
GSA-FSS  
HEW-FDA  
VA-DMS

PREPARING ACTIVITY GSA-FSS

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