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**FEDERAL SPECIFICATION**

**CLEANING COMPOUND, WINDSHIELD  
(SOLVENT AND ANTI-FREEZE, CONCENTRATED)**

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

**1. SCOPE AND CLASSIFICATION**

1.1 Scope. The cleaning compound covered in this specification is intended for use in vehicle windshield washing systems.

1.2 Classification. This specification covers one grade of material.

**2. APPLICABLE DOCUMENTS**

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:

QQ-S-698	-	Steel, Sheet and Strip, Low Carbon.
TT-E-489	-	Enamel, Alkyd, Gloss (For Exterior and Interior Surfaces).
TT-P-636	-	Primer Coating, Alkyd, Wood and Ferrous Metal.
PPP-B-636	-	Boxes, Shipping, Fiberboard.
PPP-C-96	-	Cans, Metal, 28 Gage and Lighter.

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, Fort 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 Standard:

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:

16 CFR 1500 - Federal Hazardous Substances 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.

National Motor Freight Traffic Association, Inc., Agent:

National Motor Freight Classification.

(Application for copies should be addressed to the American Trucking Association, 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.)

American Society for Testing and Materials:

D-1590 - Surface Tension of Industrial Water and Industrial Waste Water.

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

3. REQUIREMENTS

3.1 Freezing. When tested as specified in 4.4.1, a solution of one part cleaning compound and two parts distilled water shall remain liquid at 0°F. (-17.8°C).

3.2 Surface tension. When tested as specified in 4.4.2, a solution of one part cleaning compound and sixteen parts distilled water shall have a surface tension between 30 and 37 dynes per centimeter.

3.3 Insoluble matter. When tested as specified in 4.4.3, insoluble matter shall not exceed 0.005 percent by weight.

3.4 Deleterious action. When tested as specified in 4.4.4, a solution of one part cleaning compound and four parts of distilled water shall have no deleterious action on painted test panels.

3.5 Workmanship. The cleaning compound shall be colorless or tinted transparent solution, free from foreign matter and miscible with water in all concentrations.

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**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 use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by 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.

**4.2 Sampling for acceptance.** From each inspection lot offered for Government inspection, four 16 ounce containers shall be randomly selected, marked, and forwarded to the laboratory designated to perform acceptance testing.

**4.3 Examination of preparation for delivery.** An examination shall be made to determine compliance with the packaging, packing and marking requirements of section 5. Defects shall be scored as specified in table I. Sampling shall be scored as specified in table I. Sampling shall be in accordance with MIL-STD-105. The sample unit shall be one container fully prepared for delivery. The lot shall be the number of containers offered for inspection at one time. The inspection level shall be S-2 with an AQL of 4.0, expressed in terms of defects per hundred.

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

**Table I. Examination of preparation for delivery**

Examine	Defect
Marking	Incorrect; incomplete; illegible; omitted, improper size, location, sequence or method of application.
Containers	Components missing or damaged; leaking; dents or otherwise defective.
Materials	Components missing or damaged.
Workmanship	Bulging distortion of containers.
Contents	Cushioning inadequate, improper or missing.
	Not as specified

**4.4 Examination of cleaning compound.**

**4.4.1 Freezing.** A solution of one part cleaning compound and two parts distilled water by volume shall be placed in a closed container, and the container with the solution allowed to stand overnight in a freezer maintained at 0°F. (-17.8°C.). There shall be no evidence of freezing or formation of ice crystals.

**4.4.2 Surface tension.** The surface tension of a solution of one part cleaning compound and sixteen parts distilled water by volume shall be measured according to ASTM D-1590.

**4.4.3 Insoluble matter.** Filter the contents of one 16 ounce container which has been weighed to the nearest 0.1 gram (g) into a beaker. Then reweigh the empty container. The ashless filter paper containing the precipitate, if any, shall be washed with distilled water, then ignited, and the residue weighed to the nearest 0.0001 g (0.1 mg). The ignited residue shall not be greater than 0.005 percent by weight of the cleaning compound.

**4.4.4 Deleterious action.** A solution of one part cleaning compound and four parts distilled water by volume shall be applied dropwise to a test panel. The drops shall be allowed to dry, and the panel rinsed with tap water and wiped dry with a soft cloth. There shall be no evidence of spotting, pitting, or discoloration on the painted surface.

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The test panel shall be a 4 x 6 inch (or larger) sheet of cold rolled 20 gauge steel conforming to QQ-S-698, on which has been applied one coat of primer conforming to TT-P-636, and a subsequent coat of enamel conforming to TT-E-489. The painted panels shall be allowed to dry at least 48 hours prior to use.

## 5. PREPARATION FOR DELIVERY.

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

5.1.1 Level A or B. Sixteen (16) ounces of cleaning compound shall be packaged in a can conforming to PPP-C-96, type V, class 5 or type VIII with a screw cap closure; or in a polyethylene bottle with a screw cap and liner.

5.1.2 Level C. Cleaning solution shall be packaged 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. Twelve (12) filled containers shall be packed in a box conforming to PPP-B-636, class weather resistant. The box shall be fitted with separators or dividers to provide a clearance of 3/8 inch between the top of the containers and the inside of the box.

5.2.2 Level B. Twelve (12) filled containers shall be packed in accordance with 5.2.1 except that the box shall be class domestic. The box shall be closed in accordance with the Method II of the appendix of the box specification.

5.2.3 Level C. The cleaning compound 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 the Uniform Freight Classification or National Motor Freight Classification, as applicable.

5.3 Marking. Each can or bottle shall be marked with the National Stock Number, in accordance with Federal Hazardous Substances Labeling Act. In addition, each can or bottle shall have the following instructions printed thereon: "During warm weather months, use 2 ounces per washer jar. For winter use - For 0°F. protection dilute contents of this can with two cans of water." Each shipping container shall be marked in accordance with Fed. Std. No. 123.

## 6. NOTES

6.1 Intended use. The cleaning compound is intended to be sprayed on the windshield of a moving vehicle, and to remove road dirt with the help of the windshield wipers.

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) Unit quantities required and packaged type.
- (c) Designated laboratory address (see 4.2).

### MILITARY INTEREST:

DOD was waived coordination on revisions and amendments to this specification until further notice.

### CIVIL AGENCY COORDINATING ACTIVITIES:

CSA-FSS  
DOT-FRA

Orders for this publication are to be placed with General Services Administration, acting as an agent for the Superintendent of Documents. See Section 2 of this specification to obtain extra copies and other documents referenced herein. Price 25 cents each