

METRIC

A-A-52465B

5 December 2016

SUPERSEDING

A-A-52465A

22 June 2009

## COMMERCIAL ITEM DESCRIPTION

PRIMER COATING, SYNTHETIC, VOC COMPLIANT  
(FOR BRAKE DRUMS)

The General Services Administration has authorized the use of this commercial item description (CID) as a replacement for MIL-P-62669(AT) which is hereby cancelled.

## 1. SCOPE

1.1 Scope. This CID covers a VOC compliant, synthetic primer coating that is intended for brush or spray application to a 0.4 - 0.6 mils dry film thickness on the exposed metal surfaces in the internal areas of brake and clutch assemblies in tank-automotive use.

## 2. SALIENT CHARACTERISTICS

2.1 Description. The primer coating shall be corrosion-inhibiting, quick-drying, lead and chromate free, and contain no more than 1.59 kg (3.5 pounds) per gallon of volatile organic compounds (VOC).

2.2 Materials. Unless otherwise specified herein, the materials used shall be in accordance with the manufacturer's material specifications for synthetic primer coating. The use of recovered materials made in compliance with regulatory requirements is acceptable providing that all requirements of this CID are met (see 5.5).

2.1 Pigment. The pigment portion of the primer shall consist of red or brown iron oxides (Fe<sub>2</sub>O<sub>3</sub>), zinc phosphates (Zn<sub>2</sub>P<sub>0</sub>4), anti-corrosive pigments, extender pigments, and acid insoluble siliceous material.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data that may improve this document should be sent to U.S. Army RDECOM, Tank Automotive Research, Development and Engineering Center, ATTN: RDTA-EN/STND/TRANS MS #268, 6501 E. 11 Mile Road, Warren, MI 48397-5000 or sent by email to [usarmy.detroit.rdecom.mbx.tardec-standardization@mail.mil](mailto:usarmy.detroit.rdecom.mbx.tardec-standardization@mail.mil). Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at <https://assist.dla.mil>.

AMSC N/A

FSC 8010

DISTRIBUTION STATEMENT A. Approved for public release, distribution is unlimited.

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2.2.2 Vehicle. The resin shall be a blend of an oil modified alkyd resin and a dispersion type of phenol aldehyde resin. Necessary amounts of driers, volatile solvents, anti-oxidants, wetting agents, and stabilizers may be used. The volatile material shall contain no benzene, methanol, chlorinated hydrocarbons, or other solvents of a highly toxic nature.

2.2.3 Content requirements. Water content shall be less than 1 percent (%) by weight of the primer. The amount of phthalic anhydride shall not be less than 25.0% by weight of the vehicle solids. Coarse particles and skins shall be less than 0.5% by weight of the pigment.

### 2.3 Performance.

2.3.1 Primer condition. The primer shall be free from seediness, gumminess, skinning, livering, curdling, hard caking, and grit when the container is opened before agitation. The same conditions shall remain when stored up to 7 days at temperatures from -17.8 to 60 °C (0 to 140 °F). After storage, pigment settling and light caking shall be easily and completely reincorporated to a smooth homogeneous state by stirring.

2.3.2 Isolation of vehicle. The total solids in a sample of primer shall be no less than 70.3% by weight. The vehicle solids shall be no less than 19.0% and the pigments solids between 50.3% and 53.0%. The pigment volume shall be no more than 45% of the total solid volume.

2.3.3 Drying time. Primer painted on a glass panel to a wet film thickness of 1 mil shall dry to a tacky texture in 3-6 minutes, shall be dry-to-touch in no more than half an hour, and shall be fully cured within 72 hours.

2.3.4 Painted properties. Unless otherwise specified, requirements given in this section shall be for primer that has been painted on clean steel panels to a dry film thickness of 0.4 to 0.6 mils. Methods specified shall then be followed. This film of primer shall be hard, tough, difficult to furrow off, and resistant to water and hydrocarbon fluid.

2.3.4.1 Adhesion. Allow the panel to air-dry for 1 hour, then score a line through to the metal with a sharp pointed knife. Apply water resistant, pressure sensitive adhesive tape across and perpendicular to the score line for 10 seconds before rapidly stripping off. There shall be no primer removal by the adhesive tape beyond 15.9 mm (0.0625 inch) on either side of the score line.

2.3.5 Reduced properties. When reduced 3:1 (one part thinner), allowed to stand 24 hours, then agitated, the primer coating shall completely re-disperse to a smooth homogenous state. The first break in a stream of reduced primer flowing from a #4 Ford viscosity cup shall take 60 + 5 seconds. When sprayed on a steel panel to a dry film thickness of 0.4 to 0.6 mils, it shall not run, sag, or streak when wet. When dried, it shall show no dusting, mottling, or color separation and shall present a smooth, uniform finish free from seediness.

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2.3.6 Salt spray resistance. Steel panels sprayed with the reduced primer (see 2.3.5) shall be air-dried for 96 hours. After a 24 hour salt spray test, no of rust on the exterior surface and no more than five scattered blisters, none larger than 1 mm (0.0394 inch) square, shall be found. After stripping the primer with a lacquer thinner, there shall be no more than a trace of rusting, pitting, or corrosion of the steel underneath.

2.3.7 Unit container sizes. The primer shall be furnished in either 0.946 liter (1 quart), 3.785 liter (1 gallon) multiple-friction top containers, 18.927 liter (5 gallon) lug covered steel pails, or in 208.2 liter (55 gallon) steel drums (see 5.3).

2.3.8 Material Safety Data Sheet (MSDS). The contractor shall prepare an MSDS when required to comply with the provisions of FED-STD-313 (see 5.2).

### 3. QUALITY ASSURANCE PROVISIONS

3.1 Responsibility for inspection. The contractor is responsible for the performance of all inspections (examinations and tests).

3.2 Contractor certification. The contractor shall certify and maintain substantiating evidence that the product offered meets the salient characteristics of this CID and that the product conforms to the producer's own drawings, specifications, workmanship standards, and quality assurance practices. Items with known defects shall not be submitted for Government acceptance. The Government reserves the right to require proof of such conformance prior to the first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

### 4. PACKAGING.

4.1 Packaging. Preservation, packaging, packing, labeling, and marking for the desired level shall be as specified in the contract or order (see 5.3.e).

### 5. NOTES

(This section contains information of a general or explanatory nature that maybe helpful, but is not mandatory.)

5.1 Addresses for obtaining copies of Government specifications and standards. FED-STD-313, Material Safety Data, Transportation Data and Disposal Data for Hazardous Materials Furnished to Government Activities, is available from <https://assist.dla.mil> or <http://quicksearch.dla.mil>.

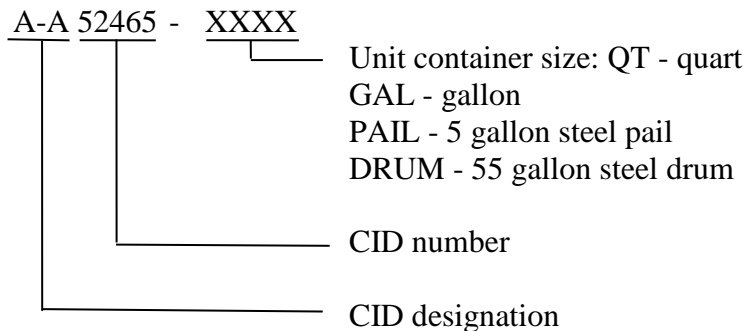
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5.2 Addresses for obtaining copies of non-Government specifications and standards. IEEE/ASTM- SI 10, American National Standard for Metric Practice: A copy of IEEE/ASTM-SI10 is available at the ASTM website <http://www.astm.org> or at ASTM International, P.O. Box C700, West Conshohocken, PA 19428-2959.

5.3 Ordering data. Acquisition documents must specify the following:

- a. Title, number, and date of this CID (to include revision number).
- b. Unit container size, quantity, and PIN.
- c. When applicable the mailing address of the activities requiring copies of the MSDS and the number of copies required.
- d. Selection of applicable level and packaging requirements.

5.4 Part or Identification Number (PIN). The PIN to be used for the synthetic primer coating acquired to this CID is created as follows:



5.5 Regulatory requirements. The offeror/contractor is encouraged to use recovered materials in accordance with Public Law 94-580 to the maximum extent practicable.

5.6 Metric products.

- a. Products manufactured to metric dimensions will be considered on an equal basis with those manufactured using inch-pound units, provided they fall within specified tolerances using conversion tables contained in the latest revision of IEEE/ASTM SI 10, and all other requirements of this CID are met.
- b. If a product is manufactured to metric dimensions and those dimensions exceed the tolerances specified in the inch-pound units, a request should be made to the contracting officer to determine if the product is acceptable.
- c. The contracting officer has the option of accepting or rejecting the product.

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Custodian:  
Army - AT

Preparing Activity:  
Army - AT

Review Activities:  
Army – CR4, SM

(Project 8010-2016-007)

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