METRIC

A-A-59173
4 March 1998
SUPERSEDING
MIL-G-46886B
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COMMERCIAL ITEM DESCRIPTION

GREASE, SILICONE

The General Service Administration has authorized the use of this commercial item description by all federal agencies.

1. SCOPE. This commercial item description (CID) covers two types of silicone greases that are intended for application as a lubricant, a sealant, and as a preservative in missile systems.

2. CLASSIFICATION. The silicone grease shall conform to the following types and sizes:

2.1 Types.

Type I - Light consistency.
Type II - Medium consistency.

2.2 Sizes.

Size A - 8 ounce (oz) tube.
Size B - 10 pound (lb) can.
Size C - 5.3 oz tube.

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any pertinent data which may be used in improving this document should be addressed to: Defense Supply Center Richmond, Standardization Program Branch, ATTN: DSCR-VBD, 8000 Jefferson Davis Highway, Richmond, VA 23297-5610.

AMSC N/A FSC 9150

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

3. SALIENT CHARACTERISTICS

3.1 Material. The silicone grease shall have an unctuous (oily, soapy) consistency that is free of lumps, crusts, or granular particles.

3.2 Penetration. The grease shall have the following penetration when tested in accordance with ASTM D217: type I - penetration (tenths of a millimeter) range of 300-340; type II- penetration (tenths of a millimeter) range of 260-300.

3.3 Foreign particles. The grease shall have the following foreign particle requirements when tested in accordance with FED-STD-791, Method 3005.4: (a) there shall not be more than 7500 particles that are of size 25 microns or greater per cubic centimeter in the grease; (b) there shall not be more than 1600 particles that are of size 75 microns or greater per cubic centimeter in the grease; (c) there shall not be any particles of size 125 microns or greater in the grease.

3.4 Oxidation stability. The oxygen pressure shall not decrease more than 34.47 kilo Pascals (kPa) during 50 hours of exposure of the material at a temperature of 150 °C when tested in accordance with ASTM D942 (an air bath may be substituted for the oil bath).

3.5 Dropping point. The grease shall have a dropping point greater than 190 °C when tested in accordance with ASTM D566 or ASTM D2265.

3.6 Evaporation. The grease shall not lose greater than 3.0 percent of its original weight by evaporation when tested in accordance with ASTM D2595.

3.7 Bleeding. Type I silicone grease shall not lose greater than 5.0 percent of its original weight by bleeding. Type II silicone grease shall not lose greater than 4.0 percent of its original weight by bleeding. The percentage of bleeding of oil from the material shall be determined in accordance with FED-STD-791, Method 321.3 except that the heating of the entire test assembly will be maintained at 150 °C for a duration of 24 hours.

3.8 Solidification. The material shall show no evidence of solidification after exposure for 24 hours at a temperature of -55 °C. Evidence of solidification shall be tested in accordance with the following test procedure: put 20 milliliters of grease in a 2.54 centimeter diameter test tube. Immerse the test tube in a suitable bath and cool to -55 °C for a period of 24 hours. Remove the sample from the test tube and examine for evidence of solidification such as lumps, crusts or granular particles.

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). Feasibility of using recovered materials must be considered for the silicone grease with respect to contamination purposes and meeting the salient characteristics of this commercial item description.

5. QUALITY ASSURANCE PROVISIONS

5.1 Product conformance. The products provided shall meet the salient characteristics of this commercial item description, 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 CID.

a. The company must have produced the silicone grease, meeting the salient characteristics of this CID, for at least 3 years.
b. The company must be able to show test data or lab results of meeting the salient characteristics of the silicone grease.
c. The company must provide a warranty of replacing defective items.

6. PACKAGING.

Preservation, packing, and marking shall be as specified in the contract or order.

7. NOTES

7.1 Part identification number (PIN). The following part identification number procedure is for government purposes and does not constitute a requirement for the contractor.

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Size: A - 8 oz tube
B - 10 lb can
C - 5.3 oz tube

Type: I - Light consistency
II - Medium consistency

Commercial item description number

7.2 Ordering data. Acquisition documents must specify the following:

a. Title, number, and date of this document.
b. Part identification number.
c. Size of containers and quantity required.

7.3 National stock numbers (NSNs). The following is a list of NSNs assigned which correspond to this CID. This list may not be indicative of all possible NSNs associated with this document.

NSN	Type	Container size
9150-00-145-0161	I	8 oz tube
9150-00-445-7819	I	10 lb can
9150-00-584-4299	II	8 oz tube
9150-01-228-3389	II	5.3 oz tube

Custodians:
Army - MI
Navy - OS

Reviewers:
Army - CD
DLA - PS

Preparing Activity:
DLA - GS

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