MIL-G-18458B(SH) AMENDMENT 5 26 March 1996 SUPERSEDING AMENDMENT 4 28 July 1987

## MILITARY SPECIFICATION

## GREASE, WIRE ROPE AND EXPOSED GEAR

This amendment forms a part of MIL-G-18458B(SH), dated 19 March 1981, and is approved for use within the Naval Sea Systems Command, Department of the Navy and is available for use by all Departments and Agencies of the Department of Defense.

# PAGE 1

\* 2.1 Under "SPECIFICATIONS FEDERAL", delete the following:

"P-D-680 - Dry Cleaning Solvent."

2.1 Under "STANDARDS FEDERAL", add:

"FED-STD-313 - Material Safety Data Sheets, Preparation and the Submission of."

\* At bottom of page: Delete and substitute beneficial comments statement.

"Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document, should be addressed to: Commander, Naval Sea Systems Command, SEA 03R42, 2531 Jefferson Davis Highway, Arlington, VA 22242-5160 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter."

- 2.1.2: Add as new paragraph:
- "2.1.2 Other Government document. The following other Government document forms a part of this specification to the extent specified herein. Unless otherwise specified, the issue shall be the one in effect on the date of the solicitation.

AMSC N/A

<u>DISTRIBUTION STATEMENT A</u>. Approved for public release; distribution is unlimited.

#### DEPARTMENT OF LABOR

Code of Federal Regulations, Title 29, Part 1910, Section 1200 - Hazard Communications Standard."

(Application for copies should be addressed to the Superintendent of Documents, Government Printing Office, Washington, DC 20402.)\*

#### PAGE 2

- 2.2: Under AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM): Delete "ASTM D 270" and add:
  - \*D 4057 Standard Practice for Manual Sampling of Petroleum and Petroleum Products. (DoD adopted)
  - D 4177 Standard Method for Automatic Sampling of Petroleum and Petroleum Products. (DoD adopted)"
- \* 3.2: Add as last sentence to the existing paragraph:

"This grease shall be of such material as to not require additional container labeling in accordance with CFR, Title 29, Part 1910, Section 1200."

- \* 3.2.1: Add as new paragraph:
- "3.2.1 The product shall not contain any ozone depleting substance(s) ODS or used for any testing procedures, which use any ODS. Also prohibited in the composition of the ingredients used in the product, 2,6-di-t-butylphenol and heavy metals such as Barium, Chromium Lead and Strontium. All derivatives or salts of these metals including chromates or dichromates are also prohibited."
- \* 3.4: Add as new paragraph:
- "3.4 <u>Toxicity</u>. The grease shall have no adverse effect on the health of personnel when used for its intended purpose. The grease shall contain no components which produce noxious vapors in such concentrations as to be an annoyance to personnel during formulation or normal use, under conditions of adequate ventilation while exercising caution to avoid prolonged contact with the skin and while observing Occupational Safety and Health Administration (OSHA) guidelines (see 6.8).

# PAGE 3

Table I, after "Test Method 321 1/" add "or 2/".

Table I, Add as new footnote 2/:

"2/ Test shall be conducted at 65.5°C (150°F) for 50 hours duration."

#### PAGE 4

- 4.4.4: Add as new paragraph:
- "4.4.4 Sampling for quality conformance tests. Samples for quality conformance tests shall be taken in accordance with ASTM D 4057 and ASTM D 4177. The samples shall be subjected to the tests specified in 4.5. Failure of the samples in any of these tests shall be cause for rejection of the lot."
- \* 4.6.1.1.2 <u>Panel finishing and cleaning</u>: Delete and replace paragraphs (b), (c) and (h) as follows:
  - \*(b) Scrub the panel with clean cotton or surgical gauze swab in a beaker of hot non aromatic petroleum solvent such as heptane.
  - (c) Rinse in warm isopropyl alcohol (70-80°F) for at least 10 seconds and air dry the panel. If required use a vacuum desiccator and set it aside for later usage.
  - (h) Finally rinse the panel in fresh boiling (80-82°F) isopropyl alcohol. Immerse the panel for at least 10 seconds to warm up to the solvent temperature prior to withdrawal. Rinsing operations shall be conducted under a hood for safety."
  - 4.6.4.1(d): Delete "minus 60°F" and substitute "minus 6.67°C (20°F)."

## PAGE 5

\* 4.6.2, line 8: Change "1/4 inch" to "0.635cm (1/4 inch)".

#### PAGE 6

- \* 4.6.3, line 4: Change "120°F + 3°F" to "48.9°C + 1.7°C (120°F + 3°F)".
- \* 4.6.4.1 (a): Change "4 by .05 by 0.007 inch" to "10.16cm by 1.27 by 0.01778cm (4 by 0.5 by 0.007 inch)".
  - 4.6,4.1 (d): Change " $60^{\circ}F + 3^{\circ}F$  to " $15.6^{\circ}C + 1.7^{\circ}C$  ( $60^{\circ}F + 3^{\circ}F$ )".
- \* 4.6.4.2 Procedure.: Delete and substitute.
- Line 2: Delete "petroleum solvent" and substitute "non aromatic petroleum solvent".
  - Line 6: Delete "0.05 inch" and substitute "0.127cm (0.05 inch)".
- \* 4.6.5, line 4: Delete "221°F 230°F" and substitute "105°C 110°C (221°F 230°F)".

\* 4.6.6.1(c): Delete "151°F + 2°F" and substitute "66.1 + 1.1 (151°F + 2°F)".

## PAGE 7

- \* 4.6.6.2, line 4: Delete "151°F" and substitute "66.1°C (151°F)".
- \* 5.1 Change "35 pounds" and "120 pounds" to "15.876 kg (35 pounds) and 54.43 kg (120 pounds)".

## PAGE 8

- \* 6.7: Delete and substitute:
- "6.7 Material safety data sheets. The contracting activity should be provided a material safety data sheet (MSDS) at the time of contract award. The MSDS is Form OSHA-20 and found as part of FED-STD-313. The MSDS shall be included with each shipment of the material covered by this specification. The Contracting officers will identify those activities requiring copies of completed Material safety data sheets (MSDS) prepared in accordance with FED-STD-313. In order to obtain the MSDS, FAR clause 52;223-3 must be in the contract."
  - 6.8: Add as new paragraph:
- "6.8 <u>Toxicity</u>. To determine conformance to requirements of 3.4, the manufacturer of the material will disclose the formulation of this product to the Navy Medical Command, MEDCOM-242, Washington, DC 20372. The disclosure of proprietary information, which shall be held in confidence by the Navy Medical Command, will include: the name, the formula and approximate percentage by weight and volume of each ingredient in the product; the results of any toxicological testing of the product; identification of its pyrolysis products; and any such other information as may be needed to permit an accurate appraisal of any toxicity problem associated with the handling, storage, application, use, disposal, or combustion of the material. Information submitted shall be clearly marked or identified to show it is being provided in connection with qualification under MIL-G-18458. Questions pertaining to the toxic effects shall be referred by the contracting activity to the Naval Medical Command (NAVMEDCOM), Washington, DC, who will act as medical advisor to the contracting activity."

# LAST PAGE

DD 1426, Standardization Document Improvement Proposal: Delete and substitute address:

"COMMANDER NAVAL SEA SYSTEMS COMMAND DEPARTMENT OF THE NAVY WASHINGTON, DC 20362-5101"

NOTE: The margins of this amendment are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) from the previous amendment were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content, irrespective of the marginal notations and relationship to the previous amendment.

Preparing activity: Navy - SH (Project 9150-1151)