

**AEROSPACE
MATERIAL
SPECIFICATION**

SAE AMS2518

REV. D

Issued 1984-04
Reaffirmed 2006-04
Revised 2010-12
Stabilized 2012-02

Superseding AMS2518C

Thread Compound, Anti-Seize, Graphite-Petrolatum

RATIONALE

This document has been determined to contain basic and stable technology which is not dynamic in nature.

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This document has been declared "Stabilized" by SAE AMS M, Aerospace Greases Committee, and will no longer be subjected to periodic reviews for currency. Users are responsible for verifying references and continued suitability of technical requirements. Newer technology may exist.

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1. SCOPE

1.1 Form

This specification covers an anti-seize compound in the form of a grease.

1.2 Application

This compound has been used as an anti-seize compound on aircraft engine spark plugs and threaded fasteners and fittings, but usage is not limited to such applications. This compound may be used safely in contact with austenitic corrosion-resistant steels, titanium, nickel, and cobalt alloys, and similar corrosion-resistant metals and alloys. This compound contains graphite which may promote corrosion of aluminum, magnesium, ferrous, zinc, and cadmium alloys or plated coatings and should not be used in contact with such metals.

1.2.1 Jurisdiction

This specification is the responsibility of SAE Committee AMS-M, because the materials under this specification are formulated and tested as greases. However, the anti-seize qualities are relevant to Committee AMS-B.

Therefore any changes or amendments to this specification shall be made by Committee AMS-M but must be formally agreed by Committee AMS-B.

1.3 Safety - Hazardous Materials

While the materials, methods, applications, and processes described or referenced in this specification may involve the use of hazardous materials, this specification does not address the hazards which may be involved in such use. It is the sole responsibility of the user to ensure familiarity with the safe and proper use of any hazardous materials and to take necessary precautionary measures to ensure the health and safety of all personnel involved.

2. APPLICABLE DOCUMENTS

The issue of the following documents in effect on the date of the purchase order forms a part of this specification to the extent specified herein. The supplier may work to a subsequent revision of a document unless a specific document issue is specified. When the referenced document has been cancelled and no superseding document has been specified, the last published issue of that document shall apply.

2.1 ASTM Publications

Available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959, Tel: 610-832-9585, www.astm.org.

ASTM C 136	Sieve Analysis of Fine and Coarse Aggregates
ASTM C 560	Chemical Analysis of Graphite
ASTM C 561	Ash in Graphite Sample
ASTM D 91	Precipitation Number of Lubricating Oils
ASTM D 92	Flash and Fire Points by Cleveland Open Cup Tester
ASTM D 127	Drop Melting Point of Petroleum Wax, Including Petrolatum
ASTM D 130	Corrosiveness to Copper from Petroleum Products by Copper Strip Test
ASTM D 445	Kinematic Viscosity of Transparent and Opaque Liquids (the Calculation of Dynamic Viscosity)
ASTM D 482	Ash from Petroleum Products
ASTM D 664	Acid Number of Petroleum Products by Potentiometric Titration
ASTM D 217	Standard Test Methods for Cone Penetration of Lubricating Grease
	NOTE: This test is used in preference to ASTM D-937 because D-937 applies heat in such a way that the petrolatum would become liquid and the graphite would fall out of suspension.
ASTM D 1500	ASTM Color of Petroleum Products (ASTM Color Scale)
ASTM D 2273	Trace Sediment in Lubricating Oils

2.2 U.S. Government Publications

Available from the Document Automation and Production Service (DAPS), Building 4/D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Tel: 215-697-6257, <http://assist.daps.dla.mil/quicksearch/>.

FED-STD-791	Lubricants, Liquid Fuels, and Related Products; Method of Testing
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3. TECHNICAL REQUIREMENTS

3.1 Composition (Percent by Weight)

As shown in Table 1.

Ingredient	min	max
Petrolatum	48	52
Graphite	48	52