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AEROSPACE MATERIAL SPECIFICATION

SAE

AMS 3078B

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| Issued | FEB 1949 |
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| Reaffirmed | OCT 1991 |
| Cancelled | MAY 1998 |

Submitted for recognition as an American National Standard

Superseding AMS 3078A

COMPOUND, CORROSION - PREVENTIVE
Soft Film, Cold Application

CANCELLATION NOTICE

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1. ACKNOWLEDGEMENT:

A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.

2. TYPE:

A ready-mixed compound, consisting of a stable, nonvolatile, petroleum-base compound and AMS 3160 petroleum solvent, suitable for application by dipping, brushing, or spraying at 70 F (21C) and higher.

3. APPLICATION:

Protection of metal parts where a soft, readily-removable film is desired and additional protective packaging is provided.

4. TECHNICAL REQUIREMENTS:

When ASTM methods are specified for determining conformance to the following requirements, tests shall be conducted in accordance with the issue of the ASTM method listed in the latest issue of AMS 2350.

4.1 Abrasiveness:

Compound shall not contain abrasive substances.

4.2 Toxicity:

Compound shall contain no materials of known toxicity. The vapor shall not cause discomfort or injury to workmen engaged in application of the compound.

4.3 Coverage:

Compound shall provide a continuous, completely protective film on metal parts under normal conditions of storage in all climates.

4.4 Setting:

Compound as applied to metal parts shall set to a firm, soft film in 24 hr at room temperature (77 F \pm 7 (25 C \pm 3.9)).

4.5 Removability:

Compound shall be readily removable by dipping in, or spraying with, AMS 3160 petroleum solvent or by wiping with cloths saturated with the solvent.

4.6 Corrosion:

Compound shall not corrode polished steel, copper, magnesium, aluminum, or cadmium plate when maintained in contact with those metals for 4 hr at 210 F \pm 2 (98.9 C \pm 1.1).

4.7 Percentage of Nonvolatile Matter:

The percentage (by weight) of nonvolatile matter in each different compound shall be established on the approval sample in accordance with the following procedure. The percentage of nonvolatile matter for succeeding shipments shall not deviate from the established value by more than +5.0% and -1.0% of that value.

- 4.7.1 Ten g of compound shall be weighed to the nearest mg into a tared evaporating dish and the disk and contents heated for 24 hr in an oven at 221 - 230 F (105 - 110 C). After heating, the dish shall be cooled to room temperature and reweighed, and the nonvolatile matter calculated from the residual weight.

4.8 Properties of Nonvolatile Matter:

Nonvolatile matter (either that portion remaining from mixed compound after complete evaporation of the solvent or the original base compound from which the mixed compound was made) shall conform to the following requirements:

- | | | | |
|-------|-------------------|-----------------------------|-------------------------|
| 4.8.1 | Melting Point: | 125 - 150 F (51.7 - 65.6 C) | ASTM D127 |
| 4.8.2 | Flash Point, Min: | 350 F (176.7 C) | ASTM D92 |
| 4.8.3 | Consistency: | 200 - 325 | ASTM D217 (See 4.8.3.1) |

- 4.8.3.1 Consistency sample shall be prepared as follows: After the melting point of the nonvolatile matter has been determined, the consistency tests shall be made on a sample that has been heated to 25 F degrees \pm 3 (13.9 C degrees \pm 1.7) above the melting point and poured at that temperature into a glass dish (100 x 50 mm) up to a height of 40 millimeters. The sample shall then be allowed to cool and set at a temperature of 77 F \pm 7 (25 C \pm 3.9) for 24 hours.

- 4.8.4 Ash Content: The ash content of the nonvolatile matter of each different compound shall be established on the approval sample in accordance with ASTM D482, using a 1 g sample. If the established value is 0.15% or less, the ash for succeeding shipments shall not exceed the established value by more than 20.0% of that value; if the established value is over 0.15%, the ash for succeeding shipments shall not deviate from the established value by more than \pm 10.0% of that value.

- 4.8.5 Miscibility: Nonvolatile matter shall be miscible in all proportions with aircraft engine lubricating oil as evinced by passing the following test: