

# AEROSPACE MATERIAL SPECIFICATION



**AMS 3267B**

Issued APR 1984  
Revised APR 1992  
Cancelled JUL 2004

Superseded by AMS 3284A

Sealing Compound, Low Adhesion, Corrosion Inhibiting  
for Removable Panels and Fuel Tank Inspection Plates

## CANCELLATION NOTICE

This specification has been declared "CANCELLED" by the Aerospace Materials Division, SAE, as of July, 2004, and has been superseded by AMS 3284. By this action, this document will remain listed in the Numerical Section of the Index of Aerospace Material Specifications.

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## 1. SCOPE:

### 1.1 Form:

This specification and its supplementary detail specifications cover accelerated curing synthetic rubber compounds with corrosion inhibitors and low adhesive strength, supplied as a two-component system, curing at room temperature.

### 1.2 Application:

This product has been used typically for sealing aircraft access doors and accessories where gaskets are required, but usage is not limited to such applications. The sealing compounds are resistant to both jet fuels and high aromatic aviation gasolines and are usable from -55 to +120 °C (-67 to +248 °F).

### 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.

### 1.4 Classification:

The requirements specified herein and in the applicable detail specification define each sealing compound on the basis of property characteristics and application time, as shown in the title of each detail specification.

## 2. APPLICABLE DOCUMENTS:

The following publications form a part of this specification to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order.

### 2.1 SAE Publications:

Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

|          |                                                                                                                                                        |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| AMS 2825 | Material Safety Data Sheets                                                                                                                            |
| AMS 3180 | Toluene, Industrial Grade                                                                                                                              |
| AMS 4049 | Aluminum Alloy Sheet and Plate, Alclad, 5.6Zn - 2.5Mg - 1.6Cu - 0.23Cr, (Alclad 7075; -T6 Sheet, -T651 Plate), Solution and Precipitation Heat Treated |

## 2.2 ASTM Publications:

Available from ASTM, 1916 Race Street, Philadelphia, PA 19103-1187.

|             |                                                                                                        |
|-------------|--------------------------------------------------------------------------------------------------------|
| ASTM D 792  | Specific Gravity (Relative Density) and Density of Plastics by Displacement                            |
| ASTM D 2240 | Rubber Property - Durometer Hardness                                                                   |
| ASTM D 3227 | Mercaptan Sulfur in Gasoline, Kerosine, Aviation Turbine, and Distillate Fuels (Potentiometric Method) |

## 2.3 U.S. Government Publications:

Available from Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

|                |                                                                                    |
|----------------|------------------------------------------------------------------------------------|
| TT-S-735       | Standard Test Fluids, Hydrocarbon                                                  |
| CCC-C-419      | Cloth, Duck, Cotton, Unbleached                                                    |
| PPP-B-636      | Boxes, Shipping, Fiberboard                                                        |
| PPP-C-96       | Cans, Metal, 28 Gage and Lighter                                                   |
| FED-STD-791    | Lubricants, Liquid Fuels and Related Products; Methods of Testing                  |
| MIL-P-38714    | Packaging and Packing of Two Component Materials in Semkits                        |
| MIL-C-38736    | Compound, Solvent, For Use in Integral Fuel Tanks                                  |
| MIL-STD-2073-1 | DOD Materiel, Procedures for Development and Application of Packaging Requirements |

## 3. TECHNICAL REQUIREMENTS:

### 3.1 Detail Specifications:

The requirements for a specific material shall consist of all the requirements specified herein in addition to requirements specified in the applicable detail specification. In case of conflict between requirements of this basic specification and an applicable detail specification, requirements of the detail specification shall govern.

### 3.2 Materials:

The basic ingredient used in the manufacture of these products shall be synthetic rubber of the polysulfide type with added available chromate for corrosion inhibition. The sealants shall cure by addition of a curing compound to the base compound, and shall not depend on solvent evaporation for curing. The materials shall contain no lead compounds.

### 3.3 Properties:

Shall conform to requirements specified in the applicable detail specification, determined in accordance with test methods specified in 4.5.

### 3.4 Quality:

Compound, as received by purchaser, shall be uniform in quality and condition, as free from foreign materials as commercially practicable, and free from imperfections detrimental to usage of the compound.

## 4. QUALITY ASSURANCE PROVISIONS:

### 4.1 Responsibility for Inspection:

The vendor of sealing compound shall supply all samples for vendor's tests and shall be responsible for performing all required tests. Purchaser reserves the right to sample and to perform any confirmatory testing deemed necessary to ensure that the sealing compound conforms to the requirements of this specification.

### 4.2 Classification of Tests:

#### 4.2.1 Acceptance Tests: Tests for requirements specified in Table 1 are acceptance tests and shall be performed on each lot.

TABLE 1 - Acceptance Tests

| Requirement                 | Reference                |
|-----------------------------|--------------------------|
| Color                       | See detail specification |
| Nonvolatile content         | See detail specification |
| Viscosity of base compound  | See detail specification |
| Flow, as applicable         | See detail specification |
| Application time            | See detail specification |
| Tack-free time              | See detail specification |
| Hardness                    | See detail specification |
| Weight loss and flexibility | See detail specification |

#### 4.2.1.1 The accelerated cure of 4.5.2.4 shall be used for acceptance testing.

#### 4.2.2 Preproduction Tests: Tests for all technical requirements are preproduction tests and shall be performed prior to or on the initial shipment of sealing compound to a purchaser, when a change in ingredients and/or processing requires reapproval as in 4.4.2, and when purchaser deems confirmatory testing to be required.

#### 4.2.2.1 For direct U.S. Military procurement, substantiating test data and, when requested, preproduction test material shall be submitted to the cognizant agency as directed by the procuring activity, contracting officer, or request for procurement.

#### 4.3 Sampling and Testing:

Shall be as follows:

- 4.3.1 For Acceptance Tests: Sufficient compound shall be taken at random from each lot to perform all required tests. The number of determinations for each requirement shall be as specified in the applicable test procedure or, if not specified therein, not less than three.
  - 4.3.1.1 A lot shall be all sealing compound of the same class and composition manufactured as one batch and presented for vendor's inspection at one time. An inspection lot shall not exceed 2000 pounds (907 kg) of compound and may be packaged in smaller quantities and delivered under the basic lot approval provided lot identification is maintained.
  - 4.3.1.2 Materials for testing shall, as much as is practicable, be mixed in the same containers in which the products were procured.
  - 4.3.1.3 When a statistical sampling plan has been agreed upon by purchaser and vendor, sampling shall be in accordance with such plan in lieu of sampling as in 4.3.1 and the report of 4.6 shall state that such plan was used.
- 4.3.2 For Preproduction Tests: As agreed upon by purchaser and vendor.

#### 4.4 Approval:

- 4.4.1 Sample compound shall be approved by purchaser before compound for production use is supplied, unless such approval be waived by purchaser. Results of tests on production compound shall be essentially equivalent to those on the approved sample compound.
- 4.4.2 Vendor shall use ingredients, manufacturing procedures, processes, and methods of inspection on production compound which are essentially the same as those used on the approved sample compound. If necessary to make any change in ingredients or in manufacturing procedures, vendor shall submit for reapproval a statement of the proposed changes in ingredients and/or processing and, when requested, sample compound. Production compound made by the revised procedure shall not be shipped prior to receipt of reapproval.

#### 4.5 Test Methods:

Shall be in accordance with test methods shown in Table 2.