

AEROSPACE MATERIAL SPECIFICATION

SAE

AMS 3374/3

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SEALING COMPOUND TWO-PART, CONDENSATION CURED (TYPE 3) Firewall Sealant

1. SCOPE:

1.1 Form:

This specification covers two-part, condensation cured, high temperature resistant silicone sealing compounds.

1.2 Application:

This product is used primarily for sealing aircraft firewall structures against passage of air and vapors. The cured compound shall remain an effective sealant at all temperatures between -65 and +400 °F (-54 to +204 °C) and shall be able to withstand a flash temperature of 2000 °F (1093 °C).

2. APPLICABLE DOCUMENTS:

See AMS 3374.

3. TECHNICAL REQUIREMENTS:

3.1 Basic Specifications:

The complete requirements for procuring the sealing compound described herein shall consist of this document and the latest issue of the basic specification AMS 3374.

3.2 Properties:

Shall conform to the following requirements, determined in accordance with test methods listed in AMS 3374 and Table 1.

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TABLE 1 - Properties

Test Method Paragraph (Basic Specification)	Property	Requirement
4.5.3	Specific Gravity	1.5
4.5.4	Nonvolatile Content, min	97%
4.5.5	Flow	0.5 inch (13 mm)
4.5.6	Tack-Free Time, max	6 hours
4.5.7	Hardness, Durometer A, min	50
4.5.8	Thermal-Rupture Resistance, max	1/8 inch (3.2 mm)
4.5.9	Low Temperature Flexibility	No cracking or loss of adhesion
4.5.10	Peel Strength, min	10 pounds/inch (1750 N/m)
4.5.11	Corrosion Resistance	No loss of adhesion, softening, blistering, or leaching. No corrosion of panels. Discoloration is acceptable.
4.5.12	Flame Resistance	No Flame Penetration
4.5.13	Oil Resistance	No loss of adhesion, softening, or blistering.
4.5.14	Storage Stability	Shall meet requirements for flow, tack-free time and hardness.
4.5.15	Shear Strength, psi, min	150 min (85% Cohesion)
4.5.16	Application Time, min	4 hours
4.5.17	Repairability	Adhere

4. QUALITY ASSURANCE PROVISIONS:

See AMS 3374.

5. PREPARATION FOR DELIVERY:

5.1 Packaging:

Compound shall be furnished in individual containers (for base compound and curing compound) or sectional-type containers. The ratio of the quantity in base container to the quantity contained in the curing agent container shall be the same as the recommended mixing ratio of the base compound and curing agent.

- 5.1.1 Individual Containers: The base compound shall be furnished in 1/2 pint (237 mL), 1 pint (473 mL), 1 quart (946 mL), or 1 gallon (3.79 L) metal cans, or as specified in the purchase order. Metal cans shall conform to PPP-C-96, Type V, Class 2. Tin plate cans with paper labels may be used, unless specifically prohibited by purchaser. The base compound contained in each size container shall be as shown in Table 2.

TABLE 2 - Containers

Size of Container	Amount of Base Compound
1/2 pint (237 mL)	6 fluid ounces \pm 1/8 (177 mL \pm 4)
1 pint (473 mL)	12 fluid ounces \pm 1/4 (355 mL \pm 7)
1 quart (946 mL)	24 fluid ounces \pm 1/2 (710 mL \pm 15)
1 gallon (3.79 L)	96 fluid ounces \pm 2 (2839 mL \pm 60)

- 5.1.2 Sectional Type Containers: The base compound and curing agent shall be furnished in high density polyethylene sectional type 2-1/2 ounces (74 mL) or 6 ounce (177 mL) cartridges, conforming to MIL-P-38714, as specified in the purchase order. The total content of the base compound and curing agent contained in each sectional type container shall be shown in Table 3.

TABLE 3 - Sectional Type Containers

Size of Container	Total Content (Base Resin and Curing Agent)
2-1/2 ounce (74 mL)	2 fluid ounces \pm 1/8 (59 mL \pm 4)
6 ounce (177 mL)	3-1/2 fluid ounces \pm 1/8 (59 mL \pm 4)

- 5.1.3 Containers of compound shall be prepared for shipment in accordance with commercial practice and in compliance with applicable rules and regulations pertaining to the handling, packaging, and transportation of the compound to ensure carrier acceptance and safe delivery.
- 5.1.4 Boxes of sealing compound shall be prepared for shipment in accordance with commercial practice and in compliance with applicable rules and regulations pertaining to the handling, packaging, and transportation of the compound to ensure carrier acceptance and safe delivery.

5.2 Identification:

- 5.2.1 Sealing Compound: Each cartridge and each box shall be permanently marked to show the following information:

SEALING COMPOUND, TWO-PART SILICONE (Type3), Aircraft Firewall
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MANUFACTURER'S IDENTIFICATION _____

COMPOUND NUMBER _____

LOT NUMBER _____

EXPIRATION DATE _____

Store below 80 °F (27 °C).

Refrigerator or freezer storage can prolong useful life.