

AEROSPACE MATERIAL SPECIFICATION



AMS 3267/3A

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Superseding AMS 3267/3

An American National Standard

SEALING COMPOUND, LOW ADHESION, CORROSION INHIBITING
200 to 600 Poises (20 to 60 Pa·s), 2 Hour Application Time (A-2)

1. SCOPE:

1.1 Form:

This specification covers accelerated curing synthetic rubber compounds with corrosion inhibitors and low adhesive strength supplied as a two-component system.

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. Compound is classified as an A-2 sealing compound; the compound being suitable for brush application with a minimum of two hours application time after mixing.

2. APPLICABLE DOCUMENTS:

See AMS 3267.

3. TECHNICAL REQUIREMENTS:

3.1 Basic Specification:

The complete requirements for procuring the sealing compound described herein shall consist of this document and the latest issue of the basic specification, AMS 3267.

3.2 Properties:

Compound, mixed in accordance with manufacturer's instructions and cured as specified in the basic specification, shall conform to the following requirements, determined in accordance with test methods listed in AMS 3267 and Table 1.

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TABLE 1 - Properties

Paragraph	Property	Requirement
3.2.1	Color	
3.2.1.1	Base Compound	Reddish
3.2.1.2	After Curing	Reddish
3.2.2	Specific Gravity, maximum	1.65
3.2.3	Nonvolatile Content, minimum	84% by weight
3.2.4	Viscosity of Base Compound (See 4.2)	200 to 600 poises (20 to 60 Pa·s)
3.2.5	Flow	No requirement
3.2.6	Application Time (See 4.3)	2 hours after the beginning of mixing, the viscosity shall be 2500 poises (250 Pa·s) maximum
3.2.7	Tack-Free Time, maximum	24 hours, measured from the beginning of mixing
3.2.8	Hardness (cure time to attain 30 Durometer "A"), minimum	72 hours
3.2.9	Peel Adhesion	4 pounds force per inch (700 N/m) width, maximum; 98% adhesive failure, minimum
3.2.10	Resistance to Heat	No visual evidence of softening, sponging, blistering, checking, cracking, shrinkage, or powdering
3.2.11	Resistance to Salt Water and Hydrocarbons	No visual evidence of softening, blistering, or evidence of corrosion
3.2.12	Weight Loss, maximum and Flexibility	8% weight loss No cracking when bent
3.2.13	Low-Temperature Flexibility	No visual evidence of cracking or checking
3.2.14	Accelerated Storage Stability	
3.2.14.1	Application Time, minimum (See 4.3)	2 hours, measured from the beginning of mixing

TABLE 1 - Properties (Continued)

Paragraph	Property	Requirement
3.2.14.2	Tack-Free Time, maximum	24 hours, measured from the beginning of mixing
3.2.14.3	Viscosity of base compound	100 to 500 poises (10 to 50 Pa·s)
3.2.15	Soluble chromate content, minimum	2.5% by weight

4. QUALITY ASSURANCE PROVISIONS:

See AMS 3267 and the following:

4.1 Application of Sealing Compound:

Unless otherwise specified herein, test panels shall be given three applications of sealing compound to produce a coating having a total thickness of 1/8 inch \pm 1/64 (3.2 mm \pm 0.4) when cured. A time equal to the rated application life shall be used between applications to permit release of solvents.

4.2 Viscosity of Base Compound:

Shall be determined with the base compound placed in a 1 quart (1 L) can. The can shall be filled with base compound to within 1/2 inch (12.7 mm) of the top, covered, and stored at 25 °C \pm 1 (77 °F \pm 2) for not less than eight hours. The base compound shall then be thoroughly mixed by stirring slowly for three minutes after which the can shall be closed and the base compound allowed to stand for one hour. The Brookfield Model RVF viscosimeter with No. 6 spindle at 10 rpm, or equivalent, shall be used and the readings obtained converted to poises. The highest reading shall be taken after the spindle has run in the compound for one minute.

4.3 Application Time:

The base compound and accelerator shall be stabilized at standard conditions for not less than eight hours before a sample of base compound is mixed with the proper amount of accelerator sufficient to fill a standard 1/2 pint can (1/4 L), 2-7/8 inches (73 mm) in diameter by 2-7/8 inches (73 mm) high, to within 1/2 inch (12.7 mm) of the top. This can shall be tightly covered except when determining the viscosity. At the end of two hours, measured from the beginning of the mixing period, the viscosity of the sealing compound shall be determined using a Brookfield Model RVF viscosimeter with a No. 7 spindle at 10 rpm, or equivalent. One reading shall be taken after the spindle has run in the compound for one minute.