Society of Automotive Engineers, Inc.
TWO PENNSYLVANIA PLAZA, NEW YORK, N.Y. 10000

AEROSPACE MATERIAL SPECIFICATION

AMS 3372

Issued 5-1-69
Revised

SILICONE RESIN, ELASTOMERIC
High Tear Strength, Elevated Temperature Cure

1. ACKNOWLEDGMENT: A vendor shall mention this specification number in all quotations and when acknowledging purchase orders.

2. FORM: Liquid resin and separate catalyst.

3. APPLICATION: Primarily for encapsulation, conformal coating, and adhesive applications where dielectric properties are important and an elevated temperature cure is possible.

4. COMPOSITION: The product shall be a silicone resin and suitable catalyst which will cure at elevated temperature. The product shall be black opaque, unless otherwise ordered.

5. TECHNICAL REQUIREMENTS:

5.1 Properties: The product shall conform to the following requirements; tests shall be conducted in accordance with the issue of specified ASTM methods listed in the latest issue of AMS 2350, insofar as practicable; tests shall be conducted at 23 - 29 C (73.4 - 84.2 F) unless otherwise specified.

5.1.1 Viscosity of Uncatalyzed Resin: The uncatalyzed resin shall have a viscosity not higher than 20,000 centipoises measured on a Brookfield Viscometer. In measuring viscosity, the viscometer spindle and speed used shall be consistent with the viscosity of the material being tested, in accordance with directions supplied by the manufacturer of the instrument.

5.1.2 Shelf Life of Uncatalyzed Resin: The shelf life of the uncatalyzed resin and the catalyst shall be not less than 6 months from date of shipment.

5.1.3 Pot Life of Catalyzed Resin: The pot life of the catalyzed resin shall be not less than 2 hr as determined by the time from the zero hour catalyzed viscosity necessary for the viscosity to reach 1500 poise when tested in accordance with ASTM D445.

5.1.4 Catalyzed and Cured Resin: Test specimens shall be prepared by mixing and de-airing 100 parts by weight of the basis resin and 10 parts by weight of the catalyst, casting into the appropriate shapes, and curing at 143 - 154 C (289.4 - 309.2 F) for not less than 10 min. or at 70 - 80 C (158 - 176 F) for not less than 6 hours.

Hardness, Durometer A or equiv.	25 - 45	ASTM D2240
Specific Gravity	1.07 - 1.17	ASTM D792, Method A
Dielectric Constant, at 1 MHz and 100 MHz, max	3.2	ASTM D150
Dissipation Factor, at 1 MHz and 100 MHz, max	0.01	ASTM D150
Elongation, %, min	300	ASTM D412

6. QUALITY: The product shall be uniform in quality and condition, clean, homogeneous, and free from foreign materials and from imperfections detrimental to fabrication, appearance, or performance of parts.