



# AEROSPACE MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.  
TWO PENNSYLVANIA PLAZA, NEW YORK, N.Y. 1000

## AMS 3370

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Revised

### SILICONE RESIN, ELASTOMERIC, TRANSPARENT ROOM 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 critical and a room temperature cure is desired.
4. **COMPOSITION:** The product shall be a colorless, transparent silicone resin and suitable catalyst which will cure at room temperature.
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 of 4000 - 7000 centipoise when tested using a Brookfield Viscometer Type LVF with a No. 3 or 4 spindle at 6 or 12 revolutions per minute.
    - 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 necessary for the viscosity to double in centipoise value.
    - 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 appropriate shapes, and curing at 18 - 29 °C (64.4 - 84.2 F) for not less than 72 hours.

Hardness, Durometer A	30 - 50	ASTM D2240
Specific Gravity	1.02 - 1.08	ASTM D792, Method A
Brittle Point	Pass	ASTM D746, Procedure B Temperature: -70C ± 1 (-94F ± 1.8) Time: 10 min.
Dielectric Constant at 10 <sup>5</sup> cycles, max	2.88	ASTM D150
Dissipation Factor at 10 <sup>5</sup> cycles, max	0.002	ASTM D150
Elongation, %, min	100	ASTM D412