



AEROSPACE MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS 3571/1

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Revised

POLYURETHANE CASTING RESIN, FLEXIBLE, SOLID Polyether-Type Durometer Hardness 45 "A"

1. SCOPE:

- 1.1 Form: This specification covers one type of polyether-type urethane resin and hardener which, when mixed and cured, produce elastomeric polyurethane products.
- 1.2 Application: Primarily for liquid application as electronic encapsulation or for casting parts and shapes.
- 1.3 Classification: Durometer 45 "A".

2. APPLICABLE DOCUMENTS: Shall be as shown in AMS 3571.

3. TECHNICAL REQUIREMENTS:

- 3.1 Basic Specification: The complete requirements for procuring the product described herein shall consist of this document and the latest issue of the basic specification, AMS 3571.
- 3.2 Material: Shall be as specified in AMS 3571.
- 3.3 Properties of Cured Product: The material, when mixed and cured in accordance with the manufacturer's instructions, shall conform to the following requirements, determined in accordance with test methods listed in AMS 3571:
 - 3.3.1 Hardness, Durometer "A" or equiv. 45 \pm 5
 - 3.3.2 Tensile Strength, min 300 psi
(2.07 MPa)
 - 3.3.3 Elongation, min 150%
 - 3.3.4 Tensile Stress at 100% Elongation, min 150 psi
(1.03 MPa)
 - 3.3.5 Compression Set, Method B, after 22 hr \pm 0.5 at
70°C \pm 2 (158°F \pm 3.6), max 35%
 - 3.3.6 Tear Strength, min 25 lb per in.
(4.4 kN/m)
 - 3.3.7 Bond Strength to Metal, Peel Test, min 20 lb per in.
(3.5 kN/m)

4. QUALITY ASSURANCE PROVISIONS: See AMS 3571.

5. PREPARATION FOR DELIVERY: See AMS 3571.

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