



AEROSPACE MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS 3571/7

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Revised

POLYURETHANE CASTING RESIN, FLEXIBLE, SOLID Polyether-Type Durometer Hardness 55 "D"

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 55 "D".

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 "D" or equiv. 55 $\pm$ 5
 - 3.3.2 Tensile Strength, min 3500 psi
(24.1 MPa)
 - 3.3.3 Elongation, min 275%
 - 3.3.4 Tensile Stress at 100% Elongation, min 1000 psi
(6.9 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 55%
 - 3.3.6 Tear Strength, min 350 lb per in.
(61.3 kN/m)
 - 3.3.7 Bond Strength to Metal Shear Test, min 500 psi
(3.45 MPa)

4. QUALITY ASSURANCE PROVISIONS: See AMS 3571.

5. PREPARATION FOR DELIVERY: See AMS 3571.

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