



# 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 ± 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 ± 0.5 at 70° C ± 2 (158° F ± 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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