



AEROSPACE MATERIAL

Society of Automotive Engineers, Inc.
400 COMMONWEALTH DRIVE, WARRENDALE, PA. 15096

SPECIFICATION

AMS 3571/9

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Revised

POLYURETHANE CASTING RESIN, FLEXIBLE, SOLID
Polyether-Type
Durometer Hardness 75 "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 75 "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:
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| 3.3.1 Hardness, Durometer "D" or equiv. | 75 ± 5 |
| 3.3.2 Tensile Strength, min | 5500 psi
(37.9 MPa) |
| 3.3.3 Elongation, min | 150% |
| 3.3.4 Tensile Stress at 100% Elongation, min | 3500 psi
(24.1 MPa) |
| 3.3.5 Compression Set, Method B, after 22 hr ± 0.5 at
70°C ± 2 (158°F ± 3.6), max | 25% |
| 3.3.6 Tear Strength, min | 400 lb per in.
(70.0 kN/m) |
| 3.3.7 Bond Strength to Metal, Shear Test, min | 1000 psi
(6.90 MPa) |

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