



AEROSPACE MATERIAL SPECIFICATION

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

AMS 3571/6

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Revised

POLYURETHANE CASTING RESIN, FLEXIBLE, SOLID
Polyether-Type
Durometer Hardness 95 "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 95 "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:
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| 3.3.1 Hardness, Durometer "D", or equiv. | 45 $\pm$ 5 |
| Durometer "A", or equiv. | 95 $\pm$ 5 |
| 3.3.2 Tensile Strength, min | 2500 psi
(17.2 MPa) |
| 3.3.3 Elongation, min | 275% |
| 3.3.4 Tensile Stress at 100% Elongation, min | 900 psi
(6.21 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 | 320 lb per in.
(56.0 kN/m) |
| 3.3.7 Bond Strength to Metal, Shear Test, min | 500 psi
(3.45 MPa) |

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