



AEROSPACE MATERIAL SPECIFICATION

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

AMS 3571/5

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Revised

POLYURETHANE CASTING RESIN, FLEXIBLE, SOLID Polyether-Type Durometer Hardness 85 "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 85 "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 "A" or equiv. | 85 \pm 5 |
| 3.3.2 Tensile Strength, min | 2000 psi
(13.8 MPa) |
| 3.3.3 Elongation, min | 300% |
| 3.3.4 Tensile Stress at 100% Elongation, min | 450 psi
(3.10 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 | 50% |
| 3.3.6 Tear Strength, min | 200 lb per in.
(35 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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