



AEROSPACE MATERIAL SPECIFICATION

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

AMS 3571/3

Issued 7-1-76
Revised

POLYURETHANE CASTING RESIN, FLEXIBLE, SOLID
Polyether-Type
Durometer Hardness 65 "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 65 "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:
 - 3.3.1 Hardness, Durometer "A" or equiv. 65 \pm 5
 - 3.3.2 Tensile Strength, min 650 psi
(4.50 MPa)
 - 3.3.3 Elongation, min 180%
 - 3.3.4 Tensile Stress at 100% Elongation, min 300 psi
(2.07 MPa)
 - 3.3.5 Compression Set, Method B, after 22 hr \pm 0.5
70°C \pm 2 (158°F \pm 3.6), max 40%
 - 3.3.6 Tear Strength, min 100 lb per in.
(17.5 kN/m)
 - 3.3.7 Bond Strength to Metal, Peel Test, min 20 lb per in.
(3.5 kN/m)

SAE Technical Board rules provide that: "All technical reports, including standards approved and practices recommended, are advisory only. Their use by anyone engaged in industry or trade is entirely voluntary. There is no agreement to adhere to any SAE standard or recommended practice, and no commitment to conform to or be guided by any technical report. In formulating and approving technical reports, the Board and its Committees will not investigate or consider patents which may apply to the subject matter. Prospective users of the report are responsible for protecting themselves against liability for infringement of patents."