

AEROSPACE MATERIAL SPECIFICATION



AMS 3568/2A

Issued JUL 1983
Revised JUL 1993
Reaffirmed JAN 2006

Superseding AMS 3568/2

Foam, Polyether Urethane (EU) Elastomer, Shock Absorbing 15 Pounds/Cubic Foot (240 kg/m³) Density

1. SCOPE:

This specification covers a chemically or mechanically expanded polyether urethane (EU) elastomeric foam material in the form of ready-to-use sheet.

1.1 Application:

See AMS 3568.

2. APPLICABLE DOCUMENTS:

See AMS 3568.

3. TECHNICAL REQUIREMENTS:

3.1 Basic Specification:

The complete requirements for procuring the foam sheet described herein shall consist of this document and the latest issue of the basic specification, AMS 3568.

3.2 Material:

Shall be an elastomeric polyether urethane (EU) foam as specified in AMS 3568 formed by open or closed cells, with natural (cream) color.

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3.3 Properties:

The foam sheet shall conform to requirements shown in Table 1, determined in accordance with test methods listed in AMS 3568:

TABLE 1 - Properties

Paragraph	Property	Requirement
3.3.1	Density	14 to 17 pounds per cubic foot (224 to 272 kg/m ³)
3.3.2	Compression Deflection for 20% Compression, maximum	8 psi (55.2 kPa)
3.3.3	Compression Deflection for 40% Compression, maximum	12 psi (82.7 kPa)
3.3.4	Tensile Strength, minimum	50 psi (345 kPa)
3.3.5	Elongation, minimum	60.0%
3.3.6	Shock Absorption Resiliency, rebound, maximum	35.0%
3.3.7	Compression Set, maximum	20.0%
3.3.8	Dimensional Change, maximum	2.0%
3.3.9	Low-Temperature Flexibility	No cracking
3.3.10	Water Content, maximum	2.5%
3.3.11	Water Absorption, maximum	3.5%
3.3.12	Corrosion	The copper surfaces exposed to the foam specimen shall exhibit no corrosion, pitting, or alteration of the metal surface texture. Slight discoloration, tarnish, or surface oxidation is permissible.
3.3.13	Hydrolytic Stability	The sample shall exhibit no surface tackiness, exudation, or cell degradation on visual inspection, and the recovery thickness shall be not less than 15% of the initial value.
3.3.14	Dry Heat Aging	
3.3.14.1	Compression Set, maximum	15%