



AEROSPACE MATERIAL SPECIFICATION

AMS3349

REV. D

Issued 1969-11
Revised 1993-10
Reaffirmed 2007-03
Stabilized 2014-05

Superseding AMS3349C

Silicone (VMQ) Rubber
1100 psi (7.58 MPa) Tensile Strength, High Resiliency
65 - 75

RATIONALE

This document has been determined to contain basic and stable technology which is not dynamic in nature.

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1. SCOPE:

1.1 Form:

This specification covers a silicone (VMQ) rubber in the form of sheet, strip, tubing, molded shapes, and extrusions.

1.2 Application:

These products have been used typically for parts required to operate or seal from -65 to +205 °C (-85 to +401 °F), compounded especially for high strength and resiliency, but usage is not limited to such applications.

- 1.2.1 Silicone elastomer is resistant to deterioration by weathering and aircraft piston engine oil and remains flexible over the temperature range noted. This rubber is not normally suitable for use in contact with gasoline or aromatic fuels and low-aniline-point petroleum-base fluids due to excessive swelling of the elastomer.

1.3 Safety-Hazardous Materials:

While the materials, methods, applications, and processes described or referenced in this specification may involve the use of hazardous materials, this specification does not address the hazards which may be involved in such use. It is the sole responsibility of the user to ensure familiarity with the safe and proper use of any hazardous materials and to take necessary precautionary measures to ensure the health and safety of all personnel involved.

2. APPLICABLE DOCUMENTS:

The following publications form a part of this specification to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order.

2.1 SAE Publications:

Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

AMS 2279 Tolerances, Rubber Products

MAM 2279 Tolerances, Metric, Rubber Products

AMS 2810 Identification and Packaging, Elastomeric Products

2.2 ASTM Publications:

Available from ASTM, 100 Barr Harbour Drive, West Conshohocken, PA 19428-2959.

ASTM D 297 Rubber Products - Chemical Analysis

ASTM D 395 Rubber Property - Compression Set

ASTM D 412 Rubber Properties in Tension

ASTM D 471 Rubber Property - Effect of Liquids

ASTM D 573 Rubber - Deterioration in An Air Oven

ASTM D 624 Rubber Property - Tear Resistance

ASTM D 1415 Rubber Property - International Hardness

ASTM D 2137 Rubber Property - Brittleness Point of Flexible Polymers and Coated Fabrics

ASTM D 2240 Rubber Property - Durometer Hardness

ASTM D 2632 Rubber Property - Resilience by Vertical Rebound

3. TECHNICAL REQUIREMENTS:

3.1 Material:

Shall be a compound, based on a silicone (VMQ) rubber, suitably cured to produce a product meeting the requirements of 3.2.

3.2 Properties:

The product shall conform to requirements shown in Table 1, 3.2.11, and 3.2.12; tests shall be performed on the product supplied and in accordance with specified ASTM methods, insofar as practicable.