



AEROSPACE MATERIAL SPECIFICATION

AMS7264™**REV. B**

Issued 1982-10
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Revised 2019-10

Superseding AMS7264A

(R) Rubber: Methyl Vinyl Silicone (MVQ)
High Temperature Resistant, Low Compression Set
65 - 75 Type "A" Hardness
For Seals in a Static Application - Resistant to 500 °F (260 °C)

RATIONALE

For Five-Year Review and to reformat to the latest AMS7XXX series template.

1. SCOPE

1.1 Form

This specification covers a Methyl Vinyl Silicone (MVQ) rubber in the form of molded rings for aeronautical and aerospace applications. For sheet, strip, tubing, extrusions, and molded shapes it is the responsibility of the user to determine suitability.

1.2 Application

This material has resistance to high temperatures, but usage is not limited to such applications. This material has a typical service temperature range from -80 to +500 °F (-62 to +260 °C) in static applications. The service temperature range of the material is a general temperature range, but the presence of particular fluids and specific design requirements may modify this range. Each application should be considered separately. It is the responsibility of the user to determine that this specification is appropriate for the environments (temperature range, fluids exposure, etc.) in which it is sought to be used.

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1.3 Order of Precedence

Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained. This specification is in addition to and in no way limiting, superseding, or abrogating any contractual obligation as required by the applicable procurement document. In the event of conflict in requirements, the order of precedence shall be:

1. Procurement Document or Contractual Agreement and all statutory and regulatory requirements (excluding this document)
2. Applicable purchaser's drawing or SAE ASXXXX Parts Standard
3. Specification referenced on the drawing
4. This document
5. All specifications referenced in this document

1.4 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 issue of the following documents in effect on the date of the purchase order forms a part of this specification to the extent specified herein. The supplier may work to a subsequent revision of a document unless a specific document issue is specified. When the referenced document has been cancelled and no superseding document has been specified, the last published issue of that document shall apply.

2.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

AMS2817	Packaging and Identification Preformed Packings
AIR851	O-Ring Tension Testing Calculations
ARP3050	Suitable Test Sizes for O-Ring Specifications
AS568	Aerospace Size Standard for O-Rings
AS5752	Visual Inspection Standard for Elastomeric Sealing Elements Other than O-rings
AS6414	Manufacturing Processing Requirements for Molded Elastomer Components Used in Aerospace Applications

2.2 ASTM Publications

Available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959, Tel: 610-832-9585, www.astm.org.

- ASTM D297 Standard Test Methods for Rubber Products- Chemical Analysis
- ASTM D395 Standard Test Method for Rubber Property - Compression Set Method B
- ASTM D573 Standard Test Method for Rubber - Deterioration in an Air Oven
- ASTM D1329 Standard Test Method for Evaluating Rubber Property - Retraction at Lower Temperatures (TR)
- ASTM D1414 Testing Rubber O-Rings
- ASTM D2240 Standard Test Method for Rubber Property - Durometer Hardness

2.3 ISO Publications

Available from International ANSI 1, ch. De la Voie-Creuse, CP 56, CH-1211 Geneva 20, Switzerland or www.iso.org.

- ISO 3601-1 Fluid Power Systems - O-rings - Part 1: Inside diameter, cross sections, tolerances and size identification code
- ISO 3601-3 Fluid Power Systems - O-rings - Part 3: Quality Acceptance Criteria

2.4 NCSL Publications

Available from NCSL International, 2995 Wilderness Place, Suite 107, Boulder CO 80301, Tel: 303-440-3339, www.ncsli.org.

- ANSI/ASQ Z1.4 Sampling Procedures and Tables for Inspection by Attributes

3. TECHNICAL REQUIREMENTS

3.1 Compound

Shall be prepared from ingredients as shall be necessary to achieve the requirements detailed in this standard and shall be a compound, based on the polymer specified in 1.1, suitably cured to produce product meeting the requirements of 3.2. Reprocessed vulcanized material is not acceptable.

3.2 Qualification Properties

The material as processed by the molder in the form as defined in Table 1 (test sample) shall conform to the requirements shown in Table 1; calculations of tensile strength and elongation may be made in accordance with AIR851.

Material shall be tested on the part standard 7XXX-214 pertaining to this material specification and if no part standard exists then testing shall be on size standard AS568-214 O-rings to determine the qualification properties.