



AEROSPACE MATERIAL SPECIFICATION

AMS3240™**REV. L**

Issued	1944-11
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Revised	2022-06

Superseding AMS3240K

(R) Elastomer: Chloroprene Rubber (CR)
Weather Resistant
35 - 45

RATIONALE

Five-Year Review and update of this document to standardize the document so that it conforms to the format of the latest AMS3XXX series template.

1. SCOPE

1.1 Form

This specification covers a chloroprene rubber (CR) that can be used to manufacture product in the form of sheet, strip, tubing, extrusions, and molded shapes such as window channels, bumper pads, chafing strips, etc. For molded rings, compression seals, molded O-ring cord, and molded-in-place gaskets for aeronautical and aerospace applications, use the equivalent AMS7XXX specification.

1.2 Application

This material type has resistance to weathering but usage is not limited to such applications. This material type has a typical service temperature range of -40 to +212 °F (-40 to +100 °C). 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.

1.3 Order of Precedence

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. Statutory and regulatory requirements,
2. Procurement document or contractual agreement,
3. Applicable purchaser's drawing and/or design data including specifications and requirements specified therein,
4. This document,
5. All specifications referenced in this document.

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Documents

Document Sharing Hub

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.

AMS2279	Tolerances, Rubber Products
AMS2810	Identification and Packaging, Elastomeric Products
AMS4027	Aluminum Alloy, Sheet and Plate, 1.0Mg - 0.60Si - 0.28Cu - 0.20Cr (6061; -T6 Sheet, -T651 Plate), Solution and Precipitation Heat Treated
AMS5513	Steel, Corrosion-Resistant, Sheet, Strip, and Plate, 19Cr - 9.2Ni (SAE 30304), Solution Heat Treated
AMS5630	Steel, Corrosion-Resistant, Bars, Wire, and Forgings, 17Cr - 0.52Mo (0.95 - 1.20C) (440C)
AMS6345	Steel, Sheet, Strip, and Plate, 0.95Cr - 0.20Mo (0.28 - 0.33C) (SAE 4130), Normalized or Otherwise Heat Treated
AMS-QQ-A-250/4	Aluminum Alloy 2024, Plate and Sheet
AMS-QQ-A-250/12	Aluminum Alloy 7075, Plate and Sheet

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 Methods for Rubber Property - Compression Set
ASTM D412	Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers - Tension
ASTM D471	Standard Test Methods for Test Methods for Rubber Property - Effect of Liquids
ASTM D573	Standard Test Methods for Rubber - Deterioration in an Air Oven
ASTM D624	Standard Test Methods for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers
ASTM D1149	Standard Test Methods for Rubber Deterioration - Cracking in an Ozone Controlled Environment

ASTM D2137 Standard Test Methods Rubber Property - Brittleness Point of Flexible Polymers and Coated Fabrics

ASTM D2240 Standard Test Methods for Rubber Property - Durometer Hardness

2.3 ASME Publications

Available from American Society of Mechanical Engineers, 22 Law Drive, P.O. Box 2900, Fairfield, NJ 07007-2900, Tel: 973-882-1170, www.asme.org.

ASME B46.1 Surface Texture, Surface Roughness, Waviness and Lay

2.4 U.S. Government Publications

Copies of these documents are available online at <https://quicksearch.dla.mil>.

MIL-PRF-6083 Hydraulic Fluid, Petroleum Base

3. TECHNICAL REQUIREMENTS

3.1 Material

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 (regrind) is not acceptable.

3.2 Properties

The product shall conform to requirements shown in Table 1.