

**AEROSPACE
MATERIAL
SPECIFICATION**

SAE AMS3273

REV. F

Issued 1958-08
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Reaffirmed 2005-05
Stabilized 2011-08

Superseding AMS3273E

Chloroprene (CR) Rubber Sheet, Nylon Cloth Reinforced
Weather Resistant

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 nylon-cloth-reinforced chloroprene (CR) rubber in the form of sheet.
 - 1.2 Application: This product has been used typically for parts, such as gaskets, seals, diaphragms, and chafing strips, requiring resistance to weather, ozone, moderate heat, low temperature, -water, and petroleum-base lubricating oil, but usage is not limited to such applications.
 - 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.
 - 2.1.1 Aerospace Material Specifications:

AMS 2810 - Identification and Packaging, Elastomeric Products

2.2 ASTM Publications: Available from ASTM, 1916 Race Street, Philadelphia, PA 19103-1187.

ASTM D 471 - Rubber Property-Effect of Liquids

ASTM D 573 - Rubber-Deterioration in an Air Oven

ASTM D 751 - Testing Coated Fabrics

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

2.3 U.S. Government Publications: Available from Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

2.3.1 Federal Standards:

FED-STD-191 -Textile Test Methods

3. TECHNICAL REQUIREMENTS:

3.1 Material and Fabrication: The product shall consist of a single ply of a nylon cloth, having either a plain weave or a 2-up and 1-down twill weave, coated on both faces with a chloroprene (CR) rubber compound, the rubber being cured to produce a product meeting the requirements of 3.2. Thickness of coating shall be substantially uniform and shall be equal in thickness on both faces of sheet coated on both faces. Maximum thickness of the fabric shall be 0.006 inch (0.15 mm) for finished sheet thicknesses of 0.025 inch (0.64 mm) and under and 0.016 inch (0.41 mm) for sheet thickness over 0.025 inch (0.64 mm).

3.1.1 Color: Shall be black.

3.1.2 Surface Cleanliness: Sheet having evenly dusted surfaces will be acceptable. Surfaces shall be cleanable without damage to the sheet and shall be cementable.

3.2 Properties: Sheet shall conform to the following requirements; tests shall be performed on the sheet supplied and in accordance with specified ASTM test methods, insofar as practicable:

3.2.1 As Received: Shall be as specified in Table I, determined in accordance with ASTM D 751.

3.2.2 <u>Aliphatic Fuel Resistance</u> : (Immediate Deteriorated Properties)	ASTM D 471 Medium: Temperature: Time	ASTM Ref. Fuel A 20° - 30°C (68° - 86°F) 70 hours ± 0.5
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3.2.2.1 Volume Change -5 to +20%