SAE Aerospace
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AEROSPACE MATERIAL SPECIFICATION

SAE AMS3270 REV. K

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Superseding AMS3270J

Chloroprene (CR) Rubber Sheet, Cotton Fabric Reinforced Weather Resistant

RATIONALE

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

STABILIZED NOTICE

This document has been declared "Stabilized" by SAE AMS P, Polymeric Materials Committee, and will no longer be subjected to periodic reviews for currency. Users are responsible for verifying references and continued suitability of technical requirements. Newer technology may exist.

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1. SCOPE:

1.1 Form: This specification covers cotton-fabric-reinforced chloroprene (CR) rubber in the form of sheet.

1.2 Application: Primarily for parts, such as gaskets and seals, requiring resistance to weather, moderate heat, water, and petroleum-base lubricating oil.

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

3. TECHNICAL REQUIREMENTS:

3.1 Material and Fabrication: The product shall consist of a single ply of woven cotton fabric of the type specified in 3.1.1 for the respective nominal thicknesses, impregnated and coated on both faces with a chloroprene (CR) rubber compound, the rubber being cured to produce a product meeting all technical requirements of this specification. Thickness of coating shall be substantially uniform and equal on both faces of the sheet.

3.1.1 Construction: Shall be as specified in Table I.

TABLE I

	Nominal Thickness, Inch				
	0.008	0.010	0.025	0.035	0.050
Fabric Type	Balloon Cloth	6.25 Sheeting	Grade A Airplane Cloth	#10 Duck	#10 Duck
Thread Count, per inch, min					
Warp	120	60	80	45	45
Filling	120	48	80	27	27
Finished Weight, oz per sq yd	6.5 - 9.5	8.0 - 12.0	24.5 - 29.5	29.0 - 41.0	49.0 - 59.0

TABLE I (SI)

	Nominal Thickness. Millimeters				
	0.20	0.25	0.64	0.89	1.27
Fabric Type	Balloon Cloth	6.25 Sheeting	Grade A Airplane Cloth	#10 Duck	#10 Duck
Thread Count, per 25.4 mm, min					
Warp	120	60	80	45	45
Filling	120	48	80	27	27
Finished Weight, g/m2	220 - 322	271 - 407	831 - 1000	983 - 1390	1661 - 2000