AEROSPACE
MATERIAL SPECIFICATIONS

SOCIETY OF AUTOMOTIVE ENGINEERS, Inc. 485 Lexington Ave., New York 17, N.Y.

AMS 3270F

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SYNTHETIC RUBBER SHEET, COTTON FABRIC REINFORCED
Weather Resistant, Chloroprene Type

1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.

2. APPLICATION: Primarily for parts, such as gaskets, seals, and chafing strips, requiring resistance to weather, moderate heat, water, and petroleum base lubricating oil.

3. MATERIAL AND FABRICATION: Material shall consist of a single ply of woven cotton fabric impregnated and coated on both sides with a chloroprene type synthetic rubber compound. Thickness of coating shall be substantially uniform on both sides of the sheet.

4. TECHNICAL REQUIREMENTS:

4.1 General:

4.1.1 Color: Shall be black.

4.1.2 Surface Cleanliness: Material having evenly dusted surfaces will be acceptable. When specified, surfaces shall be capable of being cleaned without damage to the material and shall be cementable.

4.1.3 Weathering: When specified, material shall have weather resistance acceptable to the purchaser as determined by a procedure agreed upon by purchaser and vendor.

4.1.4 Corrosion: The product shall not have a corrosive effect on other materials when exposed to conditions normally encountered in service. Discoloration of metal shall not be considered objectionable.

4.2 Construction:

	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 in., min					
Warp	120	60	80	45	45
Filling	120	48	80	27	27
Finished Weight, oz per sq yd	8.0 ± 1.5	10.0 ± 2.0	27.0 ± 2.5	35.0 ± 6.0	54.0 ± 5.0

4.3 Properties: The product shall conform to the following requirements; tests shall be performed on the product supplied and in accordance with the issue of specified ASTM methods listed in the latest issue of AMS 2350, insofar as practicable.

4.3.1 As Received:

4.3.1.1 Breaking Strength, Grab Method, lb, min			ASTM D751
Nominal Thickness, in.	Warp	Filling	
0.008	40	40	
0.010	37	19	
0.025	90	90	
0.035	250	170	
0.050	250	170	
4.3.1.2 Bursting Strength, Diaphragm Bursting Tester, psi, min			ASTM D751
Nominal Thickness, in.			
0.008	70		
0.010	50		
0.025	125		
0.035	350		
0.050	350		
4.3.1.3 Hydrostatic Pressure Resistance at 20 psi	No leaks in 1 hr		ASTM D751
4.3.1.4 Adhesion, lb per in. width, min	5		ASTM D751
4.3.2 Non-Aromatic Fuel Resistance: Ø (Immediate Deteriorated Properties)			ASTM D471 Medium: ASTM Ref. Fuel A Temperature: 20 - 30 C (68 - 86 F) Time: 70 hr
4.3.2.1 Volume Change, %	0 to +20		
4.3.2.2 Surface Tackiness	None		
4.3.3 Oil Resistance: (Immediate Deteriorated Properties)			ASTM D471 Medium: ASTM Oil No. 3 Temperature: 100 C ± 1 (212 F ± 1.8) Time: 70 hr
4.3.3.1 Volume Change, %	+20 to +65		
4.3.3.2 Surface Tackiness	None		
4.3.4 Dry Heat Resistance:			ASTM D573 Temperature: 100 C ± 1 (212 F ± 1.8) Time: 70 hr
4.3.4.1 Surface Hardening	None		
4.3.4.2 Bend (flat)	No cracking or checking		
4.3.5 Low Temperature Brittleness: Ø	Pass		ASTM D2137 Temperature: -35 C ± 1 (-31 F ± 1.8)