

AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS 3240 A

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SYNTHETIC RUBBER

Weather Resistant, Chloroprene Type (35-45)

1. **ACKNOWLEDGMENT:** A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
2. **FORM:** Sheet, strip, tubing, molded shapes, extrusions, or as ordered.
3. **APPLICATION:** Primarily for parts, such as window channels, bumper pads, chafing strips, and weather seals, requiring resistance to weather.
4. **TECHNICAL REQUIREMENTS:**
 - 4.1 **General:**
 - 4.1.1 **Weathering:** When specified, the product shall have weather resistance acceptable to the purchaser as determined by a procedure agreed upon by purchaser and vendor.
 - 4.1.2 **Corrosion:** The product shall not have a corrosive or other deleterious effect on other materials when exposed to conditions normally encountered in service. Discoloration of metal shall not be considered objectionable.
 - 4.2 **Properties:** Unless otherwise specified, the product shall conform to the following requirements; tests shall be performed on the product supplied and in accordance with listed ASTM Methods, insofar as practicable.

	<u>Property</u>	<u>Value</u>	<u>Test Method</u>
4.2.1	As Received:		
	Hardness, Durometer "A" or equiv.	40 + 5	
	Tensile Strength, psi, min	900	ASTM D412-49T
	Elongation, %, min	350	ASTM D412-49T
4.2.2	Processing Oil Resistance:		ASTM D471-49T
	(Immediate Deteriorated Properties)		
	Tensile Strength Reduction, %, max (based on area before immersion)	70	Medium: ASTM Oil No. 3 Temperature: 212 F + 2
	Elongation Reduction, %, max	50	Time: 70 hr
	Volume Change (Method A), %	+70 to +140	
	Decomposition	None	
	Surface Tackiness	None	
4.2.3	Dry Heat Resistance:		ASTM D573-48
	Hardness Change, Durometer "A" or equiv.	0 to +15	
	Tensile Strength Reduction, %, max	25	Temperature: 212 F + 2
	Elongation Reduction, %, max	35	Time: 70 hr
	Bend (flat)	No cracks	

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<u>Property</u>	<u>Value</u>	<u>Test Method</u>
4.2.4 <u>Compression Set:</u>		ASTM D395-49T, Method B
Per cent of Original Deflection, <u>max</u>	75	Temperature: 212F \pm 2
Per cent of Original Thickness, <u>max</u>	30	Time: 70 hr
		Compressed to 60% of original thickness
4.2.5 <u>Low Temperature Brittleness:</u>	Pass	ASTM D736-46T
		Temperature: -40 F \pm 2
		Time: 5 hr

5. QUALITY: The product shall be uniform in quality and condition, clean, smooth, and free from foreign materials and from defects detrimental to fabrication, appearance, or performance of parts.

6. TOLERANCES: Unless otherwise specified, the following tolerances apply:

6.1 Sheet and Strip:

Nominal Thickness Inch	Tolerance, Inch Plus and Minus
1/8 and under	1/64
Over 1/8 to 1/2, incl	1/32
Over 1/2	3/64

6.2 Tubing:

Nominal Wall Thickness Inch	Tolerance Plus and Minus
Under 1/16	0.005 inch
1/16 and over	10%

7. REPORTS: Unless otherwise specified, the vendor shall furnish with each shipment three copies of a report stating that the product meets the requirements of this specification. This report shall include the purchase order number, material specification number, vendor's compound number, form or part number, and quantity.

8. IDENTIFICATION: Unless otherwise specified, all material shall be identified and marked in accordance with the latest issue of AMS 2810.

9. PACKAGING:

9.1 Packaging shall be accomplished in such a manner as to ensure that the product, during shipment and storage, will not be permanently distorted, and will be protected against damage from exposure to weathering or any normal hazard.

9.2 Each package shall be permanently and legibly marked in accordance with the latest issue of AMS 2810.