

AEROSPACE MATERIAL SPECIFICATION

SAE AMS3252

REV. K

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Superseding AMS3252J	

Synthetic Rubber and Cork Composition
General Purpose
Firm

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 a synthetic rubber and cork composition in the form of sheet, strip, and molded shapes.

1.2 Application

This product has been used typically for parts, such as packings, seals, grommets, line support blocks, and tank strap pads, where cushioning and vibration damping are of prime importance, 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 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 724-776-4970 (outside USA), www.sae.org.

AMS 2810

Identification and Packaging, Elastomeric Products

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 D 297	Rubber Products - Chemical Analysis
ASTM D 395	Rubber Property - Compression Set
ASTM D 412	Rubber Properties in Tension
ASTM D 471	Rubber Property - Effect of Liquids
ASTM D 573	Rubber - Deterioration in An Air Oven
ASTM D 2137	Rubber Property - Brittleness Point of Flexible Polymers and Coated Fabrics
ASTM F 36	Compressibility and Recovery of Gasket Materials
ASTM F 104	Classification System for Nonmetallic Gasket Materials

3. TECHNICAL REQUIREMENTS

3.1 Material

Shall be a granulated cork uniformly dispersed in a synthetic rubber compound, suitably cured to produce a product meeting the requirements of 3.2. Joints shall be vulcanized and the joint section shall have essentially the same strength and size as the solid section.

3.2 Properties

The product shall conform to the following requirements shown in Table 1; tests shall be performed on the product supplied and in accordance with specified ASTM methods, insofar as practicable:

TABLE 1 - PROPERTIES

Paragraph	Test	Requirement	Test Method
3.2.1	As Received		
3.2.1.1	Compressibility	35% ± 5	ASTM F 36
3.2.1.2	Elongation, minimum	75%	ASTM D 412, Die B or C
3.2.1.3	Density	0.91 to 1.10 g/cm ³	ASTM D 297
3.2.2	Aliphatic Fuel Resistance (Immediate Deteriorated Properties)		ASTM D 471 Medium: ASTM Ref. Fuel A
3.2.2.1	Compressibility Change (See 8.2)	-10 to +20%	Temperature: 68 to 86 °F (20 to 30 °C) Time: 22 hours ± 0.5
3.2.2.2	Volume Change	-5 to +25%	
3.2.2.3	Weight Change		
3.2.2.3.1	Upon removal from fuel	0 to +25%	
3.2.2.3.2	After 22 hours ± 0.5 air drying at 20 to 30 °C (68 to 86 °F), maximum (based on unimmersed weight)	-8%	