



AEROSPACE MATERIAL SPECIFICATION

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AMS 3194

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SILICONE RUBBER SPONGE Closed Cell, Firm, Extreme Low Temperature

1. **ACKNOWLEDGMENT:** A vendor shall mention this specification number in all quotations and when acknowledging purchase orders.
2. **FORM:** Sheet, strip, molded shapes, and extrusions.
3. **APPLICATION:** Primarily for general applications requiring the use of closed cell firm sponge rubber that will be flexible from -112 to +205 C (-170 to +401 F). Compression set may be high at the higher temperatures.
4. **TECHNICAL REQUIREMENTS:**
 - 4.1 **General:**
 - 4.1.1 **Finish:** Unless otherwise specified, the top and bottom surfaces of sheet and strip and the exterior surfaces of molded parts and extrusions (except ends) shall have a natural finish.
 - 4.2 **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.
 - 4.2.1 **As Received:**

4.2.1.1 Compression - Deflection, psi	12 - 20	ASTM D1056
		Temperature: 20 - 30 C (68 - 86 F)
4.2.1.2 Density, lb per cu in., max	0.030	
4.2.2 Compression Set:		ASTM D1056
		Temperature: 100 C $\pm$ 1 (212 F $\pm$ 1.8)
4.2.2.1 Per cent of original deflection, max	60	Time: 22 hr
4.2.2.2 Per cent of original thickness, max	30	
4.2.3 Low Temperature Brittleness:	Pass	ASTM D736 (See Note 1)
		Temperature: -90 C $\pm$ 3 (-130 F $\pm$ 5.4)
		Time: 5 hr
- Note 1. To be specified only until satisfactory replacement test and values are established.
5. **QUALITY:** The product shall be uniform in quality and condition, clean, and free from foreign materials and from imperfections detrimental to fabrication, appearance, or performance of parts.
6. **TOLERANCES:** Unless otherwise specified, the following tolerances shall apply; measurements shall be made in accordance with the issue of ASTM D1056 listed in the latest issue of AMS 2350.

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