

AEROSPACE MATERIAL SPECIFICATIONS

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

AMS 3198G

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SYNTHETIC RUBBER SPONGE Chloroprene Type, Medium

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, molded shapes, or as ordered.
3. APPLICATION: Primarily for general applications requiring the use of open cell medium sponge rubber as pads and seals in the temperature range of -40 to +80 C (-40 to +176 F).
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 effect on other materials when exposed to conditions normally encountered in service. Discoloration of metal shall not be considered objectionable.
 - 4.1.3 Finish: The top and bottom surfaces of sheet and strip, and the exterior surfaces of molded parts, shall have a natural skin finish. Unless otherwise specified, fabric or wire mesh type of surface impressions are not objectionable.
 - 4.1.4 Color: Shall be black, unless otherwise specified.
 - 4.1.5 Low Temperature: When specified, the product shall have low temperature flexibility acceptable to the purchaser as determined by a procedure agreed upon by purchaser and vendor.
 - 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 6 to 13
ASTM D1056
Temperature: 20 - 30 C
(68 - 86 F)

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4.2.1.2 Specific Volume

Unless otherwise specified, the specific volume for each nominal thickness shall be as specified below; a tolerance of $\pm 10\%$ will be allowed.

Nominal Thickness Inches	Specific Volume cu in. per lb
1/16	34
3/32	40
1/8	42
3/16	45
1/4	47
5/16	49
3/8	51
1/2	55
5/8	59
3/4	63
7/8	66
1	70
1-1/2	76

4.2.1.3 Hydrogen Ion Concentration, pH

7.0 $\pm$ 1.0

See Note 1

4.2.2 Dry Heat Resistance:

See Note 2

4.2.2.1 Compression-Deflection Change, %

-5 to +30

Temperature: 100 C $\pm$ 1
(212 F $\pm$ 1.8)

4.2.2.2 Specific Volume Change, %

-10 to +10

Time: 22 hr

4.2.2.3 Bend (flat)

No cracking
or checkingØ 4.2.3 Compression Set:

ASTM D1056

Ø 4.2.3.1 Per cent of original deflection, max

50

Temperature: 70 C $\pm$ 1
(158 F $\pm$ 1.8)

4.2.3.2 Per cent of original thickness, max

25

Time: 22 hr

Note 1. Dice approximately 1 cu in. of sponge to approximately 1/8 in. or smaller cubes and extract with continuous agitation for 1 hr with 100 ml of freshly distilled water. Determine pH of the extract.

Note 2. A sample of material 4 in. square shall be suspended in the oven by a wire attached to one corner of the sample. After heating, the sample shall be removed from the oven and trimmed to 2 in. square by removing 1 in. from each edge prior to testing. Standard compression-deflection specimens shall be cut from the sample and tested.

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

6. TOLERANCES: Unless otherwise specified, the following tolerances apply; measurements shall be made in accordance with the issue of ASTM D1056 listed in the latest issue of AMS 2350.