



PRODUCT NEWS

Auburn Manufacturing Co.
 29 Stack St., Middletown, CT 06457
 Phone (860) 346-6677 FAX (860) 346-1334
www.auburn-mfg.com
 email:info@auburn-mfg.com

SILICONE SPONGE RUBBER FROM AUBURN

Introduction

Flexible, compressible closed cell silicone sponge is suggested for high performance gasketing, thermal shielding, vibration mounts, and press pads. It is available in three grades of compressibility, determined by compression deflection, and in four constructions. **R10470** is general purpose silicone sponge and can be used in most applications. **R10480** has extremely low compression set and will maintain its resiliency even under extended compression. **R10460** is flame retardant. With **R10460** held in the vertical

position and exposed to a 2,000 degree flame for 12 seconds, there is no residual flame and less than a 10 second afterglow. Like **R10480**, **R10460** is especially resistant to compression set. **R10450** silicone sponge with fiberglass reinforcement is an unique construction. It has the compressibility of sponge, plus dimensional stability in the X-Y direction. The absence of stretch contributes to the consistent size and shape of die cut parts and eliminates outward extrusion under pressure.

Availability

		R10470 Medium		R10470 Firm	R10480 Soft	R10480 Medium	R10460 Medium	R10450 Reinforced
	Length/Width	Continuous Length, 36" wd	Sheets 24" x 24" 36" x 36"	36" x 36" only	36" x 36" only	36" x 36" only	36" x 36" only	36" x 36" only
Thickness	1/16 ± 1/64	•		•			•	•
	3/32 ± 1/64	•		•			•	•
	1/8 ± 1/32	•		•	•		•	•
	3/16 ± 1/32	•		•	•		•	•
	1/4 + 3/64-1/32			•	•		•	
	3/8 ± 3/64			•	•		•	
	1/2 ± 3/64			•	•		•	
	Color	Orange-Ian		Orange-Tan	Red	Brown	Dark Blue	Blue Gray

* Special order, minimum quantity

Common Properties**

Water Absorption (ASTM D1056)	less than 5%	Thermal Conductivity (average)	0.6 BTU in./hr.ft. ² F	Specific Heat	0.3 BTU/lb.-F
Dielectric Strength	145 volts/mil(apprx.)	Linear Thermal Expansion (room temp. to +500°F)	1.8 x 10 ⁻⁵ in./in./F	Outgassing (NASA testing) (after 24 hrs. @ 257°F in vacuum)	less than 1 % Weight loss

**All properties are typical values and should not be used for writing specifications

GASKETS VIBRATION MOUNTS SEALS CUSHIONS PRESS PADS

Specific Properties**

Product		Compression Deflection PSI (compressed 25% at room temperature)	Tensile Strength PSI	Elongation at break %	Compression Set, % (compressed 50% for 22 hours at 212°F)	Density lb./in*
R10470 General Purpose	Medium	6-14	90	200	25	.017
	Firm	12-20	130	200	25	.025
R10480 Low Compression Set	Soft	2-7	50	75	5	.012
	Medium	6-14	75	125	5	.017
R10460 Flame Retardant***	Medium	6-14	75	125	5	.017
R10450 Fiberglass Reinforced		8-16	180 (fabric break PPI)	<10	25	.020
ASTM Test Method		D1056	D412	D412	D1056	D297 Hydrostatic Method

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Meets UL 94 Flammability Classification 94HF-1.

Specifications

Product		AMS-3195	AMS-3196	MIL-R-6130 Type II, Gr. B&C	MIL-R-46089	BOEING BMS 1-23	BOEING BMS 1-60 Type 1, Gr. B	DOUGLAS DMS 1597	DOUGLAS DMS 1980 Gr. 2
R10470	Medium	•		•	•	•		•	
	Firm		•	•	•			•	
R10480	Soft			•					
	Medium	•		•	•	•		•	
R10460	Medium	•		•	•	•	•	•	•
R10450		None							

Adhesive Backings

We will apply pressure sensitive silicone or acrylic adhesive to standard sheets (36" x 36" or 24" x 24") of R10450, R10460, R10470 and R10480. Sheet thickness should be 1/16" tk. or more. The self-adhering sheets permit substantial savings because they are easy to apply, simplify production, and eliminate the high cost of bonding. The silicone adhesive withstands the same temperature extremes, -100°F to +500°F, as the silicone rubber sheet. Acrylic adhesive has a temperature range of -40°F to +300°F and offers the advantage of twice the adhesion to steel and a longer shelf life than silicone adhesive. The self-adhering sheets are protected with an easily removed liner for application to a clean, dry, degreased surface.