



COHRLastic R10400 M



Flame Retardant Silicone Sponge

COHRLastic® R10400 M is a flame retardant closed cell sponge recognized to UL 94 V-0 requirements. This product is available in seven different thicknesses and delivers medium firmness, making it suitable for a wide range of gasketing applications. The material is flexible and compressible with excellent weatherability and non-stick properties. In addition, R10400 M is post-cured to minimize volatiles for a clean gasketing application.

HCR Chemistry

R10400 M utilizes the high consistency silicone rubber (HCR) chemistry. This provides superior mechanical strength properties such as improved tear strength, abrasion resistance and tensile strength over other silicone rubber systems. Through the HCR process, R10400 M maintains a very uniform closed cell structure ensuring enhanced sealing properties. This specialty formulation is also designed for use in extreme temperature applications (-100°F to 500°F) allowing the specifying engineer a wide latitude.

Pressure Sensitive Adhesive

Optional acrylic and silicone pressure sensitive adhesives (PSA) are available. The factory-applied PSA eliminates messy secondary adhesive application. The proprietary priming process ensures adequate bond to the silicone sponge.

Specify Saint-Gobain COHRLastic® products for all your silicone gasketing needs. We supply silicones that are thermally conductive and thermally insulating.

Closed Cell Flame Retardant Silicone Sponge

Features/Benefits

- UL 94 V-0 recognized, in thicknesses from 1/16" – 1/2"
- True closed cell silicone sponge for enhanced sealing properties due to uniform cell structure formed during the HCR curing process
- Unique HCR silicone chemistry provides superior mechanical properties (increased tensile/elongation and tear strength) over competitive materials
- Silicone provides a very wide temperature use range of -100°F to 500°F
- Excellent environmental resistance to UV and ozone
- Excellent corrosion and fungus resistance
- Post-cured at extremely high temperature/ time cycle to reduce silicone out-gassing
- High dielectric strength provides electrical insulation
- Available with acrylic or silicone PSA as an option

Typical Applications

- Flame retardant lighting gaskets
- Electronic and environmental high temperature seals
- Electronic and environmental weather gasketing
- Flame retardant insulation gasketing for aircraft bulkheads
- Flame retardant vibration damping gaskets and seals

COHRLastic® R10400 M — Typical Physical Properties

Property	Units	Test Method	Typical Value Proposed
Physical			
Color	—	Visual	Blue/Gray
Compression Deflection	PSI (kPa)	ASTM D1056	10 (69)
Elongation	%	ASTM D412	250
Tensile Strength	%	ASTM D412	100 (690)
Compression Set	PSI (kPa)	ASTM D1056	10
Tear Strength	PPI (kN/m)	ASTM D624	20 (3.5)
Density	lbs./ft. ³ (kg/m ³)	ASTM 296 Hydrostatic	35 (560)
Environmental			
Water Absorption	%	ASTM D471	1%
Operating Temperature	°F (C)	internal	-100° to 500° (-73° to 260°)
FDA Extractable (Food Contact)		21 CFR 177.2600	PASS
Flammability			
Flame Rating		UL 94	V-0
Flame Spread Index	L ₅	ASTM E162	Class B
Smoke Density	D ₅	ASTM E662	Pass
Toxic Gas Emissions rating		SMP-800C	Pass
Euro Fire Protection (Rail)		DIN5510-2	Pass
Electrical and Thermal Properties			
Dielectric Constant		ASTM D150	1.78
Dielectric Strength	Volts per mil	ASTM D149	200
Volume Resistivity	Ohm-cm	ASTM D257	g ¹⁵
Thermal Conductivity	BTUin/hr/ft ² (w/m k)	ASTM C177	0.14 (.02)

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

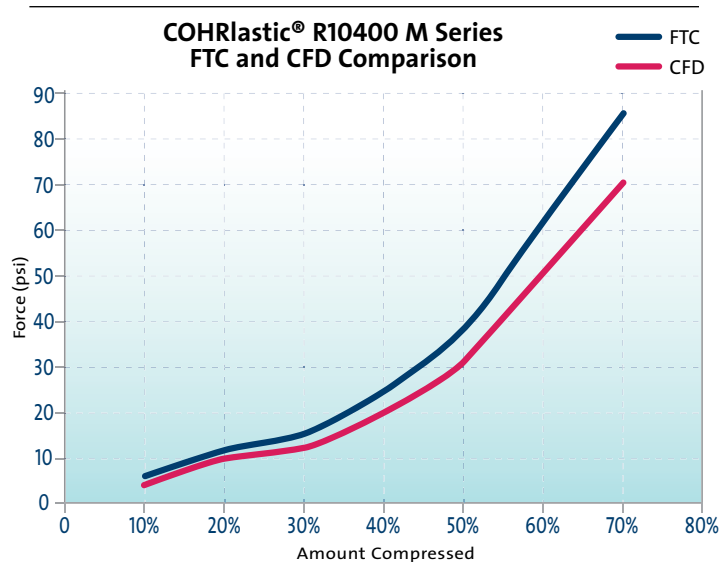
Product Configuration

Thickness in. (mm)	Sheets 36" x 36" 91 x 91mm)	Yard Goods 36" x 5 yards (91.4mm x 4.6M)
.063 (1.59)	•	•
.094 (2.38)	•	•
.125 (3.18)	•	•
.188 (4.76)	•	
.25 (6.35)	•	
.375 (9.53)	•	
.500 (12.7)	•	

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Compression Module



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