

Flame Retardant Silicone Sponge Rubber

Saint-Gobain NORSEAL® R10400M is a flame-retardant closed-cell sponge recognized to UL 94V-0 requirements. R10400M 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. The material is flexible and compressible with excellent weatherability and non-stick properties. In addition, R10400M is post-cured to minimize volatiles for a clean gasketing application.

NORSEAL R10400M is specially designed to provide the following features:

- 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 HCR process
- Unique HCR silicone chemistry provides superior mechanical properties over competitive materials
- Wide range of temperature use
- 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 Sizes

Thickness in. (mm)	.063 (1.59)	.094 (2.38)	.125 (3.18)	.188 (4.76)	.250 (6.35)	.375 (9.53)	.500 (12.7)
Continuous Roll 36 in. (914 mm)	•	•	•	-	-	-	-
Sheets 36 in. x 36 in. (914 mm x 914 mm)	•	•	•	•	•	•	•



Applications

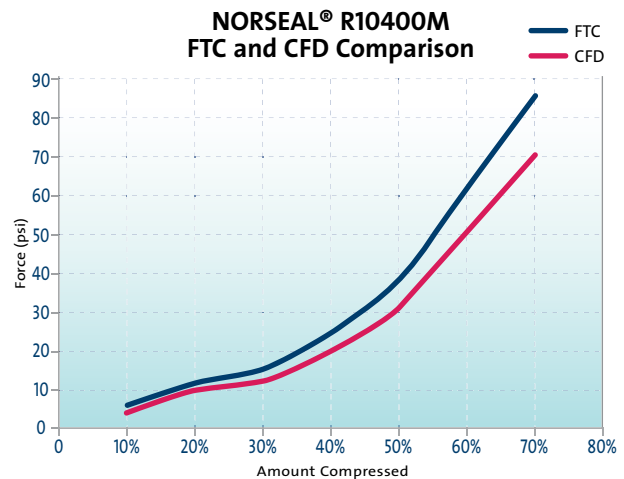
- Commercial/residential humidifiers
- Electric meters
- Filtration seals
- Flame retardant lighting gaskets
- Flame retardant insulation gasketing for aircraft bulkheads

NORSEAL® R10400M – Properties

(COHRLastic® R10400M)

Performance tests are run using standard test procedures. The values presented are typical values and should not be used for specification purposes.

Property	Test Method	4100 Series
Compression Deflection: psi (kPa)	ASTM D1056	10 (69)
Elongation: %	ASTM D412	250%
Tensile Strength: psi (kPa)	ASTM D412	100 (690)
Compression Set: %	ASTM D1056	10%
Density: lbs./ft. ³ (kg/m ³)	ASTM D3574	35 (560)
Tear Strength: ppi (kN/m)	ASTM D624	20 (3.5)
Color	Visual	Blue/Gray
Environmental		
Water Absorption: %	ASTM D471	1%
Operating Temperature	Internal	-100 to +500
FDA Extractable (Food Contact)	21 CFR 177.26	Pass
Flammability		
Flame Rating	UL 94	V-0
Flame Spread Index	ASTM E162	Class B
Smoke Density	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/mil	ASTM D149	200
Volume Resistivity: ohm-cm	ASTM D257	8 ¹⁵
Thermal Conductivity: BTU in./hr./ft. ² (w/m K)	ASTM C177	0.14 (.02)



Options (subject to minimum order requirements)

Acrylic or silicone pressure-sensitive adhesive (PSA) available in sheet format only.

Important Instructions

- Because Saint-Gobain cannot anticipate or control every potential application, we strongly recommend testing of this product under individual application conditions prior to commercial use.
- Surfaces must be clean and free of oil, grease, moisture, dust and dirt. Isopropyl alcohol is good for cleaning the surface. Do not remove liner until tape is in proper position. Avoid touching adhesive surface before application.
- Recommended service temperature of base sponge is -100°F to 500°F (-73°C to 260°C).

Shelf Life

10 years after the date of sale for base material when stored in original packaging at temperatures up to 70°F (21°C) and 50% relative humidity (see the applicable data sheets for pressure-sensitive adhesive options).

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Saint-Gobain Performance Plastics

14 McCaffrey St.
Hoosick Falls, NY 12090
1-800-962-2666
Tel: (518) 686-7301
Fax: (518) 686-4840

foams@saint-gobain.com
www.foams.saint-gobain.com

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Limited Warranty: For a period of 6 months from the date of first sale, Saint-Gobain Performance Plastics warrants this product(s) to be free from defects in manufacturing. Our only obligation will be to provide replacement product for any portion proving defective, or at our option, to refund the purchase price thereof. User assumes all other risks, if any, including the risk of injury, loss or damage, whether direct or consequential, arising out of the use, misuse, or inability to use this product(s).

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