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

<table>
<thead>
<tr>
<th>Thickness in. (mm)</th>
<th>.063 (1.59)</th>
<th>.094 (2.38)</th>
<th>.125 (3.18)</th>
<th>.188 (4.76)</th>
<th>.250 (6.35)</th>
<th>.375 (9.53)</th>
<th>.500 (12.7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous Roll</td>
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<tr>
<td>36 in. (914 mm)</td>
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<tr>
<td>Sheets</td>
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<td>36 in. x 36 in. (914 mm x 914 mm)</td>
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Applications
• Commercial/residential humidifiers
• Electric meters
• Filtration seals
• Flame retardant lighting gaskets
• Flame retardant insulation gasketing for aircraft bulkheads
NORSEAL® R10400M – Properties
(Formerly known as COHRlastic R10400M)
Performance tests are run using standard test procedures. The values presented are typical values and should not be used for specification purposes.

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>4100 Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compression Deflection: psi (kPa)</td>
<td>ASTM D1056</td>
<td>10 (69)</td>
</tr>
<tr>
<td>Elongation: %</td>
<td>ASTM D412</td>
<td>250%</td>
</tr>
<tr>
<td>Tensile Strength: psi (kPa)</td>
<td>ASTM D412</td>
<td>100 (690)</td>
</tr>
<tr>
<td>Compression Set: %</td>
<td>ASTM D1056</td>
<td>10%</td>
</tr>
<tr>
<td>Density: lbs./ft.² (kg/m³)</td>
<td>ASTM D3574</td>
<td>35 (560)</td>
</tr>
<tr>
<td>Tear Strength: ppi (kN/m)</td>
<td>ASTM D624</td>
<td>20 (3.5)</td>
</tr>
<tr>
<td>Color</td>
<td>Visual</td>
<td>Blue/Gray</td>
</tr>
</tbody>
</table>

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   8³
Thermal Conductivity: BTU in./hr./ft.² (w/m K) ASTM C177 0.14 (0.02)

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).

NORSEAL® is a registered trademark of Saint-Gobain Performance Plastics.