MED-5850
Liquid silicone rubber

DESCRIPTION
— Two-part, translucent silicone system designed for use with injection molding equipment
— Rapid cure with no post-cure required
— 1:1 Mix Ratio (Part A: Part B)

APPLICATION
— For the injection molding of parts requiring a material with a medium durometer including: molded rubber stoppers, gaskets, seals, valves, o-rings and other precision parts
— Suitable for over-molding applications
— Can be used with NuSil’s Healthcare color masterbatches for applications requiring colored silicones

NuSil™ MED-5850 may be considered for use in human implantation for a period of greater than 29 days.

PROPERTIES

<table>
<thead>
<tr>
<th>Typical Properties</th>
<th>Average Result</th>
<th>Standard</th>
<th>NT-TM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Uncured:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Translucent</td>
<td>ASTM D2090</td>
<td>002</td>
</tr>
<tr>
<td>Extrusion Rate**, Part A</td>
<td>80 g/min</td>
<td>ASTM C603</td>
<td>033</td>
</tr>
<tr>
<td>Extrusion Rate**, Part B</td>
<td>65 g/min</td>
<td>ASTM C603</td>
<td>033</td>
</tr>
<tr>
<td>Work Time</td>
<td>&gt; 72 hours</td>
<td>-</td>
<td>008</td>
</tr>
<tr>
<td><strong>Cured: 5 minutes at 165°C (329°F)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.14</td>
<td>ASTM D792</td>
<td>003</td>
</tr>
<tr>
<td>Durometer, Type A</td>
<td>50</td>
<td>ASTM D2240</td>
<td>006</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>1,450 psi (9.2 MPa)</td>
<td>ASTM D412</td>
<td>007</td>
</tr>
<tr>
<td>Elongation</td>
<td>550%</td>
<td>ASTM D412</td>
<td>007</td>
</tr>
<tr>
<td>Tear Strength</td>
<td>190 ppi (26.4 kN/m)</td>
<td>ASTM D624</td>
<td>009</td>
</tr>
<tr>
<td>Stress at 200% Strain</td>
<td>400 psi (1.1 MPa)</td>
<td>ASTM D412</td>
<td>007</td>
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</tbody>
</table>
INSTRUCTIONS FOR USE

Mixing
Combine Part A and Part B in a 1:1 mix ratio prior to use. Airless mixing, metering or dispensing equipment is recommended for production operations. If mixing by hand, take care to minimize air entrapment.

Vacuum Deaeration
Remove air entrapped during mixing by common vacuum deaeration procedure, observing all applicable safety precautions. Slowly apply full vacuum to a suitable container of at least four times the volume of material being de-aired. Hold vacuum until bulk deaeration is complete.

Substrate Considerations
Cures in contact with most materials common to biomedical assemblies, exceptions include: sulfur-cured organic rubbers, latex, chlorinated rubbers, some RTV silicones and unreacted residues of some curing agents.

Vulcanization
Curing of the blended elastomer is accelerated by heat. The pre-measured catalyst provides a fixed cure rate. Do not attempt to change molding times by mixing the two components in any other than a 1:1 ratio, as this will affect the properties of the elastomer. Only temperature adjustments should be employed to alter the rate of cure.

Note: Some bonding applications may require the use of a primer. NuSil Technology’s MED1-161 is suggested. For more information on primer selection, visit www.nusil.com and review Choosing a Silicone Primer/Adhesive System.

FDA MASTER FILE
A Master File for MED-5850 has been filed with the U.S. Food and Drug Administration. Customers interested in authorization to reference the Master File must contact NuSil Technology.

REACH COMPLIANCE
Please contact NuSil Technology’s Regulatory Compliance department with any questions or for further assistance.

SPECIFICATIONS
Do not use the properties shown in this technical profile as a basis for preparing specifications. Please contact NuSil Technology for assistance and recommendations in establishing particular specifications.

WARRANTY INFORMATION
The warranty period provided by NuSil Technology LLC (hereinafter “NuSil Technology”) is 12 months from the date of shipment when stored below 40°C in original unopened containers. Unless NuSil Technology provides a specific written warranty of fitness for a particular use, NuSil Technology’s sole warranty is that the product will meet NuSil Technology’s then current specification. NuSil Technology specifically disclaims all other expressed or implied warranties, including, but not limited to, warranties of merchantability and fitness for use. The exclusive remedy and NuSil Technology’s sole liability for breach of warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted. NuSil Technology expressly disclaims any liability for incidental or consequential damages.
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NuSil Technology has tested this material only to determine if the product meets the applicable specifications. (Please contact NuSil Technology for assistance and recommendations when establishing specifications.) When considering the use of NuSil Technology products in a particular application, review the latest Material Safety Data Sheet and contact NuSil Technology with any questions about product safety information.

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