MED-6400
Addition cure silicone dispersion

DESCRIPTION

- Two-part, low viscosity, heat curable silicone dispersion
- Cures via addition-cure chemistry
- 1:1 Mix Ratio (Part A: Part B)

APPLICATION

- Suitable for dip casting and heat-curing of thin elastomeric films
- Low viscosity makes dispersions ideal for use as sprayable coatings

NuSil™ MED-6400 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>Uncured:</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>Non-Volatile Content</td>
<td>35%</td>
<td>ASTM D2288</td>
<td>004</td>
</tr>
<tr>
<td>Viscosity</td>
<td>860 cP (860 mPas)</td>
<td>ASTM D1084, D2196</td>
<td>001</td>
</tr>
<tr>
<td>Cured: 30 minutes at 25°C (77°F), 45 minutes at 75°C (167°F), and 135 minutes at 150°C (302°F)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durometer, Type A</td>
<td>30</td>
<td>ASTM D2240</td>
<td>006</td>
</tr>
<tr>
<td>Refractive Index</td>
<td>1.43</td>
<td>ASTM D1747, D1218</td>
<td>018</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>1,600 psi (11.3 MPa)</td>
<td>ASTM D412</td>
<td>007</td>
</tr>
<tr>
<td>Elongation</td>
<td>850%</td>
<td>ASTM D412</td>
<td>007</td>
</tr>
<tr>
<td>Tear Strength</td>
<td>160 ppi (28.2 kN/m)</td>
<td>ASTM D624</td>
<td>009</td>
</tr>
<tr>
<td>Tissue Culture (Cytotoxicity Testing)</td>
<td>Pass</td>
<td>USP &lt;87&gt;</td>
<td>061</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ISO 10993-5</td>
<td></td>
</tr>
<tr>
<td>Elemental Analysis of Trace Metals</td>
<td>Pass</td>
<td>ASTM E305</td>
<td>131</td>
</tr>
</tbody>
</table>

The above properties are tested on a lot-to-lot basis. Do not use as a basis for preparing specifications. Please contact NuSil Technology for assistance and recommendations in establishing particular specifications.
INSTRUCTIONS FOR USE

Mixing
For two-part, platinum catalyzed dispersions, mixing Part A into Part B (instead of Part B into Part A) is important especially when using a dispersion with high solids content. Thoroughly stir individual components prior to addition to ensure homogeneity. Mix in a 1:1 ratio by weight. Do not use wooden spatulas to mix and avoid the use of latex gloves. Exercise care to prevent solvent loss during deairing. Accomplish additional dilution for thin film applications by adding appropriate solvent. Mixer design/size/type, blade/propeller type, shear/RPM levels, and heat generated during mixing, are important parameters and should be addressed in order to have an adequately mixed dispersion.

Warning: Consult the MSDS for MED-6400 prior to use, as its solvent carrier is hazardous.

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.

Coating & Use
Dispersions are more commonly used in dip molding processes, but can also be sprayed or cast. Make sure to apply under a fume hood or in a well ventilated environment. Care should be taken before placing coated mandrels or parts in oven due to the presence of solvent. Reference cure schedule for devolatilization times. For further information, please see NuSil’s A Guide to Silicone Dispersions – Strategies for Processing and Troubleshooting.

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

Storage
Most dispersions are stored prior to application. It is important to note that NuSil recommends keeping the dispersion in its original container when possible, tightly sealed and stored below 40° C. Care should be taken to prevent solvent evaporation and contamination during long or short term storage.

FDA MASTER FILE
A Master File for MED-6640 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.

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