MED16-6606

RTV Silicone dispersion

DESCRIPTION

— The silicone is polydimethylsiloxane polymer that cures at ambient room temperature and adheres to various substrates
— Cures at room temperature upon exposure to atmospheric moisture

APPLICATION

— Suitable for dip casting of thin elastomeric films
— For use as an adhesive for bonding and sealing silicone together
— Low viscosity makes dispersions ideal for use as sprayable coatings

NuSil™ MED16-6606 shall not 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>Non-Volatile Content</td>
<td>30%</td>
<td>ASTM D2288</td>
<td>004</td>
</tr>
<tr>
<td>Viscosity</td>
<td>95 cP (95 mPas)</td>
<td>ASTM D1084, D2196</td>
<td>001</td>
</tr>
<tr>
<td><strong>Cured: 72 hours minimum at ambient temperature and humidity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.08</td>
<td>ASTM D792</td>
<td>003</td>
</tr>
<tr>
<td>Durometer, Type A</td>
<td>25</td>
<td>ASTM D2240</td>
<td>006</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>1,400 psi (9.7 MPa)</td>
<td>ASTM D412</td>
<td>007</td>
</tr>
<tr>
<td>Elongation</td>
<td>795%</td>
<td>ASTM D412</td>
<td>007</td>
</tr>
<tr>
<td>Tear Strength</td>
<td>75 ppi (13.2 kN/m)</td>
<td>ASTM D624</td>
<td>009</td>
</tr>
<tr>
<td>Stress at 200% Strain</td>
<td>110 psi (0.76 MPa)</td>
<td>ASTM D412</td>
<td>007</td>
</tr>
<tr>
<td>Tissue Culture (Cytotoxicity Testing)</td>
<td>Pass</td>
<td>USP &lt;87&gt;</td>
<td></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.

** Performed using a Semco model 250-A pneumatic gun with a 14 gauge nozzle orifice and 90 +/- 5 psi air pressure.
INSTRUCTIONS FOR USE

Apply MED-1000, supplied in cartridges, with the use of appropriate dispensing equipment. Do not store alcohol near the worksite as traces of alcohol inhibit the catalytic system of the adhesive.

Surface Preparation

Thoroughly clean surfaces being bonded or built-up with silicone adhesive using a non-oily cleaner or mild soap to remove any surface contaminants. Do not use synthetic detergents or oil-based soaps, as they may be absorbed and subsequently leach out. Rinse first with hot water, followed by a thorough rinse using distilled water. Use compatible degreasers to clean metal surfaces.

Bonding Applications

Spread a layer of silicone adhesive on one of the surfaces. Squeeze both surfaces together to bond. Apply sufficient pressure to ensure full contact without forcing the silicone adhesive from between the pieces.

Note: Some bonding applications may require the use of a primer. NuSil Technology’s MED-160 is recommended. For more information on primer selection, visit www.nusil.com and review Choosing a Silicone Primer/Adhesive System.

Curing Time

Curing or vulcanization time depends upon the thickness of the silicone adhesive layer, relative humidity, and accessibility of atmospheric moisture to the curing adhesive. For sections of typical thickness, a relative humidity level between 20-60% is recommended to cure the adhesive at room temperature.

Generally the adhesive forms a thick, tack-free outer skin for thick section films within a few minutes after application. The vulcanization rate slows when exposing very thin films to excessive humidity (80% relative air humidity). For films below 80 microns, the relative air humidity should be within 30%-50%.

Because MED-1000 cures upon exposure to atmospheric moisture, keep tubes tightly closed when not in use. A plug of cured material may form in the tip of the tube. Remove or dispense the plug from the tube before using.

Non-Sterile Packaged Units

The acidic nature of MED-1000 provides a natural bactericidal effect. While containers may be relatively free of microorganisms, they can not be considered sterile unless subjected to a validated sterilization process. When the adhesive is fully cured it can withstand sterilization with ethylene oxide, dry heat, or steam autoclaving. The size and shape of fabricated articles must be considered when establishing the conditions of sterilization. Larger quantities and larger parts may require longer periods of heating and may retain ethylene oxide longer than small parts. It is the user’s responsibility to determine the out-gassing time required for a particular application if ethylene oxide sterilization methods are used.

Caution

Do not use MED-1000 in its uncured state to repair or encapsulate living tissue in the body. During curing, approximately 4-5% acetic acid (vinegar-like odor) is generated in vapor form. Avoid contact with eyes and skin, as uncured adhesive irritates. Take appropriate precautions if wearing contact lenses. In case of contact, flush eyes with water, use a dry towel to remove from skin and contact a physician. Keep out of REACh of children.

FDA MASTER FILE

A Master File for MED-1000 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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