# MED-2000 & MED-1511

## Silicone Adhesives

### Description
- One-part, self-leveling, solvent-free silicone materials
- Cure at room temperature upon exposure to atmospheric moisture

### Applications
- For bonding silicone elastomers to each other and some synthetics and metals

### Properties

<table>
<thead>
<tr>
<th></th>
<th>MED-2000 Average Result</th>
<th>MED-1511 Average Result</th>
<th>ASTM</th>
<th>NT-TM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncured:</td>
<td>(Translucent)</td>
<td>(Translucent)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>2.2%</td>
<td>2.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volatility</td>
<td>10 minutes</td>
<td>10 minutes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flow Rate (0.375&quot; plunge for 1 minute)</td>
<td>2 inches (50.8 mm)</td>
<td>1.75 inches (44.5 mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tack-Free Time</td>
<td>2 inches (50.8 mm)</td>
<td>1.75 inches (44.5 mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.08</td>
<td>1.12</td>
<td>D792</td>
<td>003</td>
</tr>
<tr>
<td>Durometer, Type A</td>
<td>25</td>
<td>25</td>
<td>D2240</td>
<td>006</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>1,250 psi (8.6 MPa)</td>
<td>1,400 psi (9.7 MPa)</td>
<td>D412</td>
<td>007</td>
</tr>
<tr>
<td>Elongation</td>
<td>775%</td>
<td>750%</td>
<td>D412</td>
<td>007</td>
</tr>
<tr>
<td>Tear Strength</td>
<td>75 ppi (13.2 kN/m)</td>
<td>100 ppi (17.6 kN/m)</td>
<td>D624</td>
<td>009</td>
</tr>
<tr>
<td>Stress @ 200% Strain</td>
<td>105 psi (0.72 MPa)</td>
<td>110 psi (0.76 MPa)</td>
<td>D412</td>
<td>007</td>
</tr>
<tr>
<td>Cured: 72 hours minimum @ ambient temp. and humidity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Properties tested on a lot-to-lot basis. 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.

### Instructions for Use

Apply MED-2000 and MED-1511, supplied in cartridges, with the use of an appropriate caulking gun. 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 copiously with hot water and follow with 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.

**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-2000 and MED-1511 cure upon exposure to moisture vapor, keep the 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.

### Packaging

- 100 x 10 cc Syringe
- 8 Gram Tube
- 2 Ounce Tube (59 mL)
- 5 Ounce Tube (148 mL)
- 6 Ounce Tube (177 mL)

### Warranty

12 Months
Non-Sterile Packaged Units
The acidic nature of MED-2000 and MED-1511 provides a natural bactericidal effect. While containers may be relatively free of microorganisms, it cannot 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 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 outgassing time required for a particular application if ethylene oxide sterilization methods are used.

10 cc Syringe Packaging
Over time, MED-2000 and MED-1511 may display small voids near the plunger of the 10 cc packaging configuration. This behavior is typical and has no impact on the quality or quantity of adhesive dispensed.

Caution
Do not use MED-2000 and MED-1511 in the uncured state to repair or encapsulate living tissue in the body because approximately 4.5% acetic acid (vinegar-like odor) evolves in vapor form during the cure process. Avoid contact with eyes and skin, as uncured adhesive irritates. Take appropriate precautions if wearing contact lens. In case of contact, flush eyes with water, use a dry towel to remove from skin and contact a physician. Keep out of the reach of children.

FDA Master File
Customers interested in authorization to reference U.S. Food and Drug Administration Master Files must contact NuSil Technology.

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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