Custom Filled Caulk Materials

For Aerospace Applications

MAST Technologies is a formulator of custom-filled caulking materials for aerospace applications. Caulk products are commonly used in the aerospace industry as adhesives, sealants, expansion joint materials, and to maintain surface continuity. MAST Technologies has the unique capability to design and formulate specialty filled caulks. Filler types include magnetic particles, conductive particles, glass microballoons, and aerogels. Common applications include EMI shielding, thermal barriers, and other survivability coatings.

TYPICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viscosity</td>
<td>500—12,000 cP</td>
</tr>
<tr>
<td>Cure Method</td>
<td>Room Temp, Oven, Heat</td>
</tr>
<tr>
<td>Environmental</td>
<td>Weather, jet fuel, hydraulic fluids, alcohols, acids, aromatic hydrocarbons</td>
</tr>
</tbody>
</table>

AVAILABLE POLYMER TYPES

- Silicone
- Urethane
- High Temperature Silicone
- Viton™
- Fluorosilicone
- Silicone Ablative

AVAILABLE FILLER TYPES

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Temp Range</th>
<th>Particle Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass Microballoons</td>
<td>Air-filled glass bubbles</td>
<td>1000°F</td>
<td>18 μm</td>
</tr>
<tr>
<td>Aerogels</td>
<td>Free-flowing thermal insulation</td>
<td>750°F</td>
<td>8 μm</td>
</tr>
<tr>
<td>Nickel Graphite</td>
<td>60% nickel graphite</td>
<td>N/A</td>
<td>60 μm</td>
</tr>
<tr>
<td>Iron powders</td>
<td>CIP, FeSi</td>
<td>450°F</td>
<td>3-5 μm</td>
</tr>
</tbody>
</table>

APPLICATIONS

- Sheet or gasket adhesives
- Flight qualified materials filled with specialty fillers
- Gap butter/caulks
- EMI Shielding
- MAG-RAM butters
- High Temperature Applications

METHOD OF APPLICATION

- Sprayed via HVLP sprayer
- Cast and applied via adhesive
- Putty knife applicator
- Two part SEM-Kits
- Caulk tubes

AVAILABILITY

- Standard Formats: Quart Cans, Caulking Tubes, Gallon Cans, Two Part Kits, SEM Kits

Please contact a MAST Technologies Technical Representative to discuss your specific application.

Revision: March 30, 2010

All information on this data sheet is based on laboratory testing and is not intended for design purposes. MAST Technologies makes no representations or warranties of any kind concerning this data.