

# 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.



### AVAILABLE POLYMER TYPES

Silicone  
 Urethane  
 High Temperature Silicone  
 Viton™  
 Fluorosilicone  
 Silicone Ablative

### APPLICATIONS

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

### AVAILABLE FILLER TYPES

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

### TYPICAL PROPERTIES

Viscosity: 500—12,000 cP  
 Cure Method: Room Temp, Oven, Heat Blanket, vacuum bag  
 Environmental: Weather, jet fuel, hydraulic fluids, alcohols, acids, aromatic hydrocarbons

### 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.**