

SL-017

Silicon Oxycarbide Refractory Filled Slurry



POLYMER-TO-CERAMIC™ TECHNOLOGY

Technical Data Sheet

SL-017 slurry is a refractory filled siloxane-based resin. SL-017 cures to form a thermoset at temperatures between 180°C and 300°C and forms a dense ceramic at temperatures between 850°C to as high as 1,100°C. SL-017 functions exceptionally well as a prepregging material that can be staged or advanced to the desired level of tack, can be used for wet layup, and can be used as infiltration polymer material.

Product Highlights

- Ideal polymer solution for prepregging of fabric or chopped fiber, or for wet layup.
- Optimally distributed refractory to improve packing of filler and resin.
- Stable pyrolysis cycles in inert environments from 850°C up to 1,100°C.
- Stable curing cycles in air environments up to 300°C.
- No solvents with virtually no odor.
- Easy clean up with standard solvents.
- Reduces densification and infiltration cycles.
- High mass yield through ceramic pyrolysis
- Pyrolysis produces dark gray appearance.
- Inherently Flame Retardant in thermoset as well as ceramic state.

Properties of SL-017 Slurry

Density	1.49 – 1.57 g/cm ³
Appearance	Gray liquid
Viscosity	>5,000 cP
Compatible Solvents	Hexane, Tetrahydrofuran, Toluene
Flash Point	TBD°C
Filler Type	Refractory; Proprietary Distribution
Filler Loading	>15 vol%
Polymer Type	Polyramic® SPR-688
Catalyst	None
DOT / IATA Regulations	Non Hazardous
Storage	Room Temperature*

* Refrigeration of container is recommended to extend shelf life. Periodic venting required.

Warranty

No analysis of this product is permitted. The data provided relates only to the material identified above, as supplied by Starfire Systems®, Inc. (SSI). Because conditions and methods of use of our products are beyond our control, this information should not be used as a substitution for customer's tests to ensure that SSI's products are safe, effective, and fully satisfactory for the intended end use. SSI's sole warranty is that the product will meet sales specifications in effect at the time of shipment.