

Polyramic® SPR-688



POLYMER-TO-CERAMIC™ TECHNOLOGY

Technical Data Sheet

SPR-688 is a siloxane substituted resin from Starfire's Polyramic® family. Optimal processing temperatures for SPR-688 are typically between 180°C and 300°C for the thermoset state or 850°C and 1,100°C for the ceramic state.

Product Highlights

- Suitable for a variety of fiber reinforcements.
- Forms a thermoset resin at low temperature.
- Ceramic forming polymer for Ceramic Matrix composites in combination with other Polyramic® resins.
- Thermally initiated cure.
- Organic functionalized siloxane resin.
- UV curable thin films with free radical photo initiators.
- Low viscosity infiltrates porous bodies.
- Ability to add fillers by standard methods.
- Fully Prepreggable to Generate Various Levels of Tack.

Applications

- 2-D Laminate Polymer Matrix Composites (PMC)
- 2-D Laminate Ceramic Matrix Composites (CMC)
- Aircraft Interiors
- Thermal Shields
- Automotive Components
- Electronic Packaging
- Electrical Insulating Components
- Ceramic Matrix Composite Brakes

Properties of Polyramic® SPR-688

Appearance	Clear to Opaque
Viscosity (Tailorable)	300-2,000 cPs
Density	1.11 g/cm ³
Flash Point	>93°C
Odor	Mild
Solvents	Toluene, Xylene, Hexane, THF
Dot / IATA Regulations	Non Hazardous
Storage	Room Temperature*

* May refrigerate to extend shelf life.

Maximum Use Temperature: Not recommended for long term exposure in air.

Maximum Use Temperature: Short Term in air (< 2 hrs) - 400°C.

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.