

# Polyramic® SPR-100

SiOC Forming Polymer



## Technical Data Sheet

SPR-100 is a silsesquioxane substituted polymers of the Polyramic® family. This polymer is solid at room temperature and melts at temperatures below 100 °C. When pyrolyzed, SPR-100 form high temperature SiOC matrix material and has a pyrolytic yield of greater than 80%.

### Product Highlights

- Ideal for initial fabrication of Ceramic Matrix Composite(CMC)
- Organic functionalized silsesquioxane
- Thermosets at low temperatures
- Suitable for a variety of fiber reinforcements
- Thermally cured
- Friction Modifier for semi-metallic pad formulation

### Applications

- 2D/3D Polymer Matrix Composite (PMC)
- Aircraft Interior
- Ceramic Matrix Composite Brakes
- Friction additive
- 2D/3D Ceramic Matrix Composite (CMC)
- Thermal Shield
- Electrical Insulation Component

Properties of Polyramic® SPR-100	
Product Name	SPR-100
Density	0.5-0.7 g/cm <sup>3</sup>
Appearance	Solid, Powder
Color	White
Odor	None
Compatible Solvents	Ethanol, Toluene
DoT, IATA Regulations	Non-Hazardous
Storage Requirements	Room Temperature
Softening Point	<80 °C
Pyrolytic Yield	81-85 %
Shelf Life	12 months
Catalyst	None

#### Warranty

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.