

# Matrix Slurries

- SL-MS10
- SL-MS32b
- SL-MS20
- SL-MS42b
- SL-MS30
- SL-MS50b

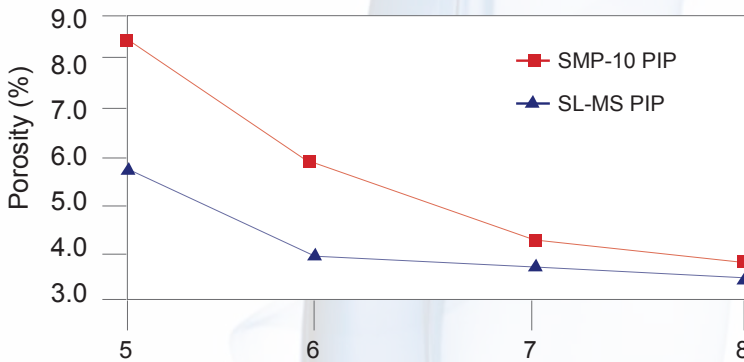


POLYMER-TO-CERAMIC™ TECHNOLOGY

## Silicon Carbide Refractory Filled Slurry

Starfire® has created a range of liquid mono and, multi modal matrix forming slurries. These engineered slurries make possible significantly improved properties for advanced composite components. Our slurries are used in friction applications, coatings, and as high temperature adhesives. SL-MS slurries combine the unique performance and processing capabilities of our of matrix polymer family, such as StarPCST™ SMP-10, with selected powder fillers and short fibers. Starfire’s SL-MS products supply users with high ceramic yields, high purity, reduced cycle times and ease of use. STARFIRE Matrix Slurries are made with SMP-10 and combinations of proprietary powder fillers produce ceramic yields that exceed 80% by weight. Products can be customized for specific performance or process requirements.

Effect of Starfire Matrix Polymer (SMP-10) versus Matrix Slurry (SL-MS) Infiltration Cycles on Porosity



### PIP Cycle

Traditional processing yields a part with a higher bulk density faster when using STARFIRE Matrix Slurries as shown above. The addition of proprietary filler combinations results in fewer infiltration cycles. This reduces the cost and time of production for composites and coatings.

Properties of SL-MS Slurries	
Density	1.00 to >2.00 g/cm <sup>3</sup>
Appearance	Tan to gray liquid
Viscosity	80 to 10,000 cPs
Solubility	Hexanes, tetrahydrofuran, toluene, Insoluble in water
Flash Point	89°C (192°F)
Boiling Point	160°C (320°F)
Moisture Absorption	<0.1% in 24 hours at room temperature
Nominal Cure Temperature	250-400°C
Surface Tension	30 dynes/sq. cm.
Storage	Refrigerate*

\*Period 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.