

SL-454WC

Polycarbosilane Wear Coating



POLYMER-TO-CERAMIC™ TECHNOLOGY

Technical Data Sheet

SL-454WC wear coating is a SiC forming polycarbosilane resin with a refractory filler. SL-454WC forms a dense ceramic at temperatures between 850°C and 1,100°C, and functions ideally as an environmental barrier coating (EBC) or a wear barrier.

Product Highlights

- Low operating viscosity ideal as a dip coating, spray coating, or paint-on coating.
- Stable pyrolysis cycles in inert environments (nitrogen, argon) at 2°C/min to 850°C - 1,100°C.
- Pyrolysis produces brown coating appearance.
- Refractory filler improves wear.
- Easy clean up with standard solvents.
- High mass yield through ceramic pyrolysis.

Properties of SL-454WC

Density	1.53 - 1.55 g/cm ³
Appearance	Brown, thin liquid
Viscosity	<500 cP
Solubility	Hexane, Tetrahydrofuran, toluene
Flash Point	TBD°C
Filler Type	Refractory; SiC
Filler Loading	<30 vol%
Polymer Type	StarPCS™ SMP-10 based
Catalyst	None
Odor	Moderate solvent smell
DOT / IATA Regulations	UN 1993, 3, II
Storage	Refrigerate*

* 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.