



Gelest Ceramic™ SI

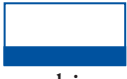



High Density Silicon Dioxide Films

Features: Provides thermally resistant dielectric coatings by dip or spin-on application.

Applications:

Electronics - provides dielectric layers for capacitors and other critical insulation applications.

Optics - provides overcoats for glass and quartz for index matching applications and as diffusion barriers.

Capsular Description:	Thickness	 thin	Cure	 thermal or UV	Hardness	 high	Type	 solvent-borne 1-part
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Seramic™ SI Silicon Dioxide Precursor

Description

Seramic™ SI is a β -chloroethylsilsesquioxane solution in methoxypropanol.

Film Properties

color	clear
dielectric constant	3.2-3.6
refractive index	
uncured films:	1.51
cured films:	2.1-2.2

Solution Properties

form	solution
solids	14-16%
density	0.96 g/cc
viscosity	3-5 cSt.
flashpoint	35°C

Shelf life: 6 months when stored below 5°C in sealed containers. Containers should be warmed to 15°C before opening to reduce condensation of water.

Standard Packaging

PP1-SESI Ceramic™ SI	
100g/	\$78.00
750g/	\$368.00

Cautions

Use in a well ventilated area.
Flammable.
Avoid contact with skin and eyes.

Application Methods

Thermal- Gelest Ceramic™ SI is applied as a coating by dipping or spin-on. After solvent evaporation, the system cures in 30-60 minutes at 300°C. As supplied, typical film deposition is 1500-2000 Å by spin-on application. Thinner films may be prepared by diluting with methoxypropanol or diglyme. The cure process liberates small amounts of ethylene and hydrogen chloride.

UV- Gelest Ceramic™ SI is converted to silicon dioxide on exposure to deep UV (<210nm). Exposed areas are insoluble, while unexposed areas may be removed by a solvent wash.