





High Dielectric Constant Barium Strontium Titanate Films

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

Applications:

- Electronics** - provides high dielectric constant layers for capacitors and electroluminescent applications.
- Optics** - provide overcoats for glass and quartz for index matching applications and as diffusion barriers.

Capsular Description:	Thickness	 thin	Cure	 thermal	Hardness	 high	Type	 solvent-borne 1-part
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Seramic™ BST Barium Strontium Titanate Precursor

Description

Seramic™ BST is mixed barium strontium and titanium double metal alkoxides in a solution of higher alcohols. Cure is two-stage, moisture followed by thermal.

Film Properties

color	clear
Metal Atom Ratio	0.5:0.5:1.0 Ba:Sr:Ti
refractive Index:	1.8-1.9

Solution Properties

form	amber solution
solids	36-40%
flashpoint:	39°C
density:	1.00g/cc
grams of BaSr _{0.5} Ti _{0.5} O ₃ per 100 grams sol'n	11.0-12.0

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-SEBS Ceramic™ BST
100g/ \$110.00
1kg/ \$660.00

Cautions

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

Application Methods

Gelest Ceramic™ BST is applied as a coating by dipping or spin-on. After solvent evaporation at 40-60% RH, the system cures in 15 minutes at 650°C. As supplied, typical film deposition is 1200-1500 Å by spin-on application at 3000rpm. Thinner films may be prepared by diluting with methoxypropanol or diglyme.