


## Thermoplastic Silicone-Block Polymers

Features: Provides thin film high strength coatings and films. Sibrid® T series are fully cured thermoplastic silicone block polymers with the ability to form thin film sections combined with high permeability allowing maximum transport of water and oxygen.

Applications:

- electronic devices** - strippable low dielectric constant coatings.
- microelectrodes** - electrolyte confinement with high gas transport.
- membranes** - form high strength, high O<sub>2</sub> and H<sub>2</sub>O transport rate films.

Capsular Description:	Thickness	 thin	Cure	 air/moisture	Hardness	 medium	Type	 solvent-borne 1-part
--------------------------	-----------	---	------	---	----------	---	------	--

### Sibrid®TI Thermoplastic Silicone-Polyimide

**Description**

Sibrid® TI is a fully cured thermoplastic silicone-polyimide block copolymer dissolved in N-methylpyrrolidone solvent. It is suitable for casting or coating.

**Film Properties**

Color	light gold-amber
Tensile Strength	>3500 psi
Dielectric Constant	2.56
Specific Gravity	1.18
Glass Transition	168°C
Permeability, O <sub>2</sub>	35 $\frac{(10^{-9} \text{ cc O}_2(\text{RTP}) \text{ cm}}{\text{s., cm}^2, \text{ cmHg } \Delta P}$

**Solution Properties**

Form	solution
Solids	14-16%
Flashpoint	86°C
Specific Gravity	1.1
Refractive Index	1.49

**Standard Packaging**

PP1-SBTI Sibrid® TI	
	100g/ \$19.00
	1kg/ \$134.00
	10kg/commercial package

**Caution**

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

**Application Methods**

Gelest Sibrid® TI is applied as a coating by spraying, dipping or brushing. The solvent is removed by evaporation at 75°C-125°C in an exhausted oven. As supplied, typical film deposition is 25-50 microns. Thinner films (<10 micron) may be prepared by diluting with THF, NMP or dioxane.