





## Silicone Resin Hard Coatings

Features: Provides clear silicone hard coat with excellent optical properties. HardSil™ AP series are curable polysilsesquioxane T-resins with excellent abrasion resistance.

### Applications:

**Optical Thermoplastics-** provides effective scratch-resistant coatings with good weather resistance for polycarbonates and polyacrylates. Examples include glazing, windscreen, computer screen and ophthalmic applications.

**Laminated Structures-** hard, heat resistant impregnants for continuous exposures up to 360°C.

Capsular Description:	Thickness		Cure		Hardness		Type	
		thin-thick		thermal		high		solvent-borne 1-part

### HardSil™ AP Abrasion Resistant Coating - Thermal Cure

#### Description

HardSil™ AP is a primerless phenyl modified silicone dispersed in methoxypropanol for continuous use at temperatures up to 360°C.

#### Film Properties

Color	clear
Hardness, Rockwell R	120R
Tensile Strength	3500psi
Refractive Index	1.54-1.56

#### Solution Properties

Form	liquid
Solids	20%
Flashpoint	35°C
Specific Gravity	0.95
Viscosity	3-5 cSt.

**Shelf life:** 12 months when stored below 25°C in sealed containers. Keep container sealed after dispensing product.

#### Standard Packaging

PP1-HSAP HardSil™ AP	
	100g/\$29.00
	750g/\$150.00
	10kg/commercial package

### Cautions

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

### Application Methods

Gelest HardSil™ AP is applied as a coating by spraying, dipping or brushing. Material is allowed to dry for 1 hour and then cured at 240°C for 20-30 minutes. Thinner films may be prepared by diluting with methoxypropanol. Cure can be accelerated by adding 0.5% zinc 2-ethylhexanoate.