





Silicone Resin Hard Coatings

Features: Provides clear silicone hard coat with excellent optical properties. HardSil™ A 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	 thin-thick	Cure	 thermal	Hardness	 high	Type	 solvent-borne 1-part
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HardSil™ AM Abrasion Resistant Coating - Thermal Cure

Description

HardSil™ AM is a primerless acrylated silicone nanocomposite dispersed in a mixture of alcohols including methanol, n-butanol and isopropanol. The nanocomposite structure imparts scratch resistance to a clear film structure.

Film Properties

Color	clear
Abrasion Resistance, Taber 500 cycles 500g CS10F	5

Solution Properties

Form	solution
Solids	19-21%
Flashpoint	19°C
Specific Gravity	0.91
Viscosity	5-15 cSt.

Shelf life: 3 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-HSAM HardSil™ AM	
	100g/\$39.00
	750g/\$210.00
	10kg/commercial package

Cautions

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

Application Methods

Gelest HardSil™ AM is applied as a coating by spraying, dipping or brushing. After solvent evaporation, the system cures in 30-60 minutes at 125-140°C. As supplied, typical film deposition is 6-8 microns. Thinner films may be prepared by diluting with methoxypropanol or isopropanol.