



# SRC18

## *Catalyst for SILGRIP® Silicone Pressure Sensitive Adhesive*

**Product Description** SRC18 silicone composition is an amino alkoxy silane liquid that promotes condensation cure of SILGRIP® silicone pressure sensitive adhesives. SRC18 catalyst can be used with all grades of SILGRIP® silicone pressure sensitive adhesives, but it is specifically recommended for use with PSA529 and PSA6573A adhesives in laminating and bonding applications. SRC18 catalyst is not recommended for making pressure sensitive adhesive tapes as it continues to react with the polymer over time.

**Key Performance Properties**

- Room and Elevated Temperature Cure

**Typical Product Data**

Property	Value
Identification	amino propyltriethoxysilane
Formula	(CH <sub>3</sub> CH <sub>2</sub> O) <sub>3</sub> SiCH <sub>2</sub> CH <sub>2</sub> NH <sub>2</sub>
Color and odor	Colorless liquid, characteristic amine-like odor
% Purity, VPC	99.4

**Instructions for Use**

**Application and Bonding**

Catalyzed adhesive may be applied with a brush, roller or any suitable coating device. Thinning, if required, may be done with toluene or paint thinner. Both surfaces to be bonded should be thoroughly cleaned with alcohol, the adhesive should be applied to them and allowed to dry either in room temperature or in an elevated temperature. The length of drying time will depend on solvent used, adhesive thickness and temperature it is exposed to. The recommended adhesive thickness is 3 to 4 mils dry. After the solvent is completely evaporated from the adhesive, the surfaces to be bonded should be firmly pressed together and the adhesive should be allowed to cure.

Cure is a function of time and temperature. Room temperature cure at 21°-25°C (70°-77°F) will require 3-7 days for the catalyzed adhesive to develop maximum strength. The cure time can be shortened by elevating temperature to a maximum of 165°C (329°F). A typical shortened cure cycle is 24 hours at 25°C (77°F) followed by 24 hours at 100°C (212°F). Note: Use adhesive in a well-ventilated area.

**Blending Instructions**

<b>Typical Formulation</b>	
Adhesive	100 parts by weight
SRC18	3.3 parts by weight

SRC18 catalyst should be added to the adhesive and stirred well before using.

Store catalyzed adhesive in tightly closed containers and use within 48 hours. Where longer pot life is required, dilute the adhesive mixture to approximately 30% silicone content with toluene or paint thinner (see precautions for solvent handling). Diluted mixtures are useful up to three months.

**Bond Strength**

The peel strength of cured PSA529 and PSA6573A adhesives is usually in the range of 4-6 lbs./inch (180° peel at 12 inches/ min).

**Limitations**

Cured adhesive bonding systems employing SRC18 catalyst have passed the physical strength tests of MIL A-25475B adhesive specification, except for high temperature peel. Such a system retained significant peel strength only up to 149°C (300°F), versus the 204°C (400°F) specified in MIL A-25457B.

**Handling and Safety**

Material Safety Data Sheets are available upon request from GE Silicones. Similar information for solvents and other chemicals used with GE Silicones products should be obtained from your suppliers. When solvents are used, proper safety precautions must be observed.

**Storage and Warranty Period**

The warranty period is 6 months from date of shipment from GE Silicones when stored in the original containers in a dry place at temperatures below 25°C (77°F).

**Availability**

Products may be ordered from GE Silicones, Waterford, NY 12188, GE Silicones sales office nearest you or an authorized GE Silicones product distributor.

**Government Requirement**

Prior to considering use of a GE Silicones product in fulfilling any government requirement, contact GE Silicones Customer Service department to determine if all government requirements can be met.

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