

Technical Data Sheet



SRC18

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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 Features and Benefits

Room and Elevated Temperature Cure

Typical Physical Properties

Property	Value
Identification	amino propyltriethoxysilane
Formula	(CH3CH20)3SiCH2CH2NH2
Color and odor	Colorless liquid, characteristic amine-like odor
% Purity, VPC	99.4

Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

Product Safety, Handling and Storage

Customers should review the latest Material Safety Data Sheet (MSDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, and any special storage conditions required for safety. MSDS are available at www.momentive.com or, upon request, from any Momentive Performance Materials (MPM) representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

Processing Recommendations

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

Typical Formulation	
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 149oC (300oF), versus the 204oC (400oF) specified in MIL A-25457B.

Limitations

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

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Contact Information

For product prices, availability, or order placement, contact our customer service by visiting www.momentive.com/Contacts

For literature and technical assistance, visit our website at: www.momentive.com

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