SS4179

Primer

Description

SS4004P, SS4044P, SS4120, SS4155, and SS4179 primers are formulated for use with Momentive Performance Materials RTV silicone rubber adhesive sealants. Momentive Performance Materials one-component products offer primerless adhesion to many substrates. Primers are used to help promote adhesion to difficult-to-bond substrates. For most Momentive Performance Materials two-component products, a primer is required when an adhesive bond is needed between the silicone rubber compound and a non-silicone surface (see table below). All primers are one-component products requiring no mixing and are supplied ready-to-use as easily pourable solvent solutions.

SS4004P and SS4044P primers help promote adhesion to metals (such as aluminum, copper, steel, stainless steel, brass, and galvanized metals), porous materials, unglazed ceramics and wood. SS4004P primer is bright pink, providing easy visual determination of uniform coating. SS4044P primer is virtually identical to SS4004P primer, but is designed for applications where discoloration of the substrate is undesirable.

SS4120 primer helps promote adhesion of Momentive Performance Materials addition cure RTVs and is used where clarity is needed. SS4155 is a general purpose primer for use with any RTV.

SS4179 primer helps promote adhesion of Momentive Performance Materials sealant to difficult-to-bond plastic substrates including:

- acrylics
- acrylonitrile-butadiene-styrene (ABS)
- cellulosics (cellulose acetate)
- high-impact styrene
- polyphenylene oxide resins (PPO®)
- polysulfones
- polyesters
- rigid polyvinychloride (PVC)
- thermoplastic resins (Noryl®)

Key Features and Benefits

- One-component - no mixing
- Simple handling procedures and equipment for easy use and low processing cost.
- Dry at room temperature and ambient humidity conditions
- Helps promote adhesion to many substrates
- SS4044P, SS4120 and SS4179 primers are transparent to preserve visibility of colorless products.
- Pink color of SS4004P and blue color of SS4155 primer permit easy visual determination of uniform application.

Typical Physical Properties

Property	SS4004P	SS4044P	SS4120	SS4155	SS4179
Color	Pink	Light Yellow	Clear, Colorless	Blue	Clear, Colorless
Specific Gravity	0.85	0.85	0.82	0.82	0.98
Solids Content, %	15	15	3	10	6
Solvent(s)	• Acetone • Isopropanol • Xylene • N-butanol	• Acetone • Isopropanol • Xylene • N-butanol	• Ethanol • Methanol	• Mineral Spirits	• Ethyl Acetate • Toluene Methanol
Flash Point, (Pensky-Martin Closed Cup)	-12ºC (10ºF)	-12ºC (10ºF)	-0.5ºC (31ºF)	37ºC (98ºF)	-3ºC (27ºF)
Dry Time, Minutes	30	30	30	30	15
D.O.T. Label	Flammable	Flammable	Flammable	Flammable	Flammable
Recommended RTVs	1 & 2 Part Condensation	1 & 2 Part Condensation	1 & 2 Part Addition	All	1 Part Condensation

PRIMER RECOMMENDATION TABLE FOR RTV TWO COMPONENTS

RTV Silicone Rubber Compound	Primers Recommended	
	Primary	Alternates
RTV11 thru 88	SS4004	SS4044, SS4155
RTV500 series	SS4004	SS4044, SS4155
RTV615, 655	SS4120	SS4155
RTV627	SS4155	SS4120
RTV630	SS4155	SS4120
RTV61X6 Series	SS4120	SS4155
RTV8000 Series	SS4004	SS4044

Specifications

FDA Status

SS4120, SS4179 and SS4044P primers can be used in food contact applications where FDA regulations apply.

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

Containers must be kept tightly closed when not in use.
A slight white precipitate may form in storage. This should not impair performance of the primer. Do not shake the container prior to use, but carefully decant the clear primer from the top of the container as needed. A laboratory check of adhesion is suggested prior to product use.

Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at www.momentive.com or, upon request, from any 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

Surface Preparation

All surfaces to be bonded should first be thoroughly cleaned. A cloth or industrial tissue saturated with naphtha or methyl ethyl ketone (MEK) may be used to remove dirt, oil or grease from non-plastic surfaces. Isopropanol is a commonly used solvent for preparation of plastic surfaces to avoid crazing of the substrate. When practical, surfaces should be wiped dry before applying the primer coating. Abrasion of the surface will also often improve adhesion.

When solvents are used as described, proper safety precautions must be observed.

Priming Procedure

Primers may be applied by brushing, wiping or dipping. (Spraying may sometimes produce erratic results.) A thin uniform primer coating of approximately 0.01 to 0.02 mm (0.5mil) thickness usually provides the strongest bond. Care should be taken with plastic substrates such as polystyrene or polycarbonates (LEXAN®) which may tend to craze or become sticky when primer is applied. Crazing can be minimized if the primer is applied with a single, continuous stroke.

For most primers, a drying time of at least 30 minutes at room temperature is suggested prior to application of the RTV silicone rubber adhesive sealant. On porous surfaces, a second coat of primer may be required. Allow at least 30 minutes drying time between coats.

SS4179 primer must be allowed to air dry for at least 15 minutes at room temperature before applying the RTV silicone rubber adhesive sealant.

For all of these silicone primers sufficient humidity must be available for proper drying. A minimum of 25% relative humidity is suggested for all but SS4155 primer for which a minimum of 40% is suggested. Formation of a chalky white haze indicates adequate drying of the S4155 primer. Do not remove or contaminate such film prior to application of the RTV silicone rubber compound.

Primers may be left to dry for up to 24 hours before application of the sealant without loss of bonding effects. However, the primed surface must be covered to prevent dirt or contaminant pick-up.

Limitations

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

Contact Information

For product prices, availability, or order placement, contact our customer service at Momentive.com/contact/customer-service

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

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