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ADHESION & PRIMER GUIDE

for Industrial RTVs

Application Development Center
WATERFORD, NY, USA

Techniques for Solvent Cleaning

1. Always use clean, fresh solvent, of the type recommended for the particular surfaces it will contact.
2. Use clean, white rags or paper towels for cleaning.
3. Use a "two rag wipe" technique. One rag is wet with solvent, the second rag is used to wipe the wet solvent from the surface. Allowing solvent to dry on the surface without wiping with a second dry, absorbent cloth, merely redeposits the contaminant as the solvent dries.
4. Always pour the solvent on the rag being used. NEVER dip the rag in the cleaning solvent, as this contaminates the solvent.
5. Always use clean containers for solvent use and storage.
6. Change to clean rags frequently, as you see they are becoming soiled. It's easy to see the soiling if you use white rags.
7. Do not spread the material being removed by the solvent over the face of the area you are cleaning (e.g. metal curtainwalls.) Any residue left may discolor or stain the face of the panels.

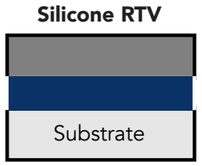
It is important to consider all the potential sources of failure because, in many instances, adhesion failure is a combination of two or more factors. Dust, for example, will contribute to adhesion failure.

Priming the surface will improve the molecular bond, thereby improving adhesion. It is very important to apply the correct amount of primer on the surface and allow for the carrier solvent to flash off completely. Please refer to the primer data table on page 4 and 5, and the data sheets located in the back of the booklet.

When selecting a primer, consider the carrier solvent. In some cases, the surface may be adversely affected by one of the carrier solvents. Roughening the surface followed up by cleaning may improve mechanical bonding. Flame etching or corona discharge surface modifications may also be considered for improving adhesion.

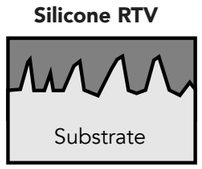
General Adhesion

There are two ways to bond a RTV adhesive to a substrate: molecular bonding and mechanical bonding. In many cases, adhesion occurs as a result of a combination of the two methods. In both methods, surface wetting is essential for obtaining ultimate bond strength.



Molecular Bonding

Chemical interaction occurs by sharing of electronics between the RTV and the surface of the substrate



Mechanical Bonding

The RTV wets into surface imperfections, creating a physical bond between the RTV and the substrate

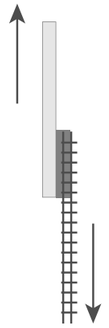
The adhesion mechanism varies with substrates and RTVs. It is best to test the adhesive characteristics of the RTV on a given surface prior to selection. In most instances, it is difficult to ascertain which RTV would work best on a given surface without testing. The guide provides a general outline for general adhesive quality on a wide range of materials.

Surface Preparation

To get the best adhesion, it is important to prepare the surface to be bonded. Cleaning with an approved solvent or soap and water is essential. Here are recommendations for solvent cleaning of surfaces to remove various contaminants; however, proper cleaning with solvents is not as simple as it may seem. If a contractor uses dirty or contaminated solvents and/or rags, the result is merely recontamination of the surface he/she is trying to clean. For this reason, the proper techniques of solvent cleaning are recommended.

Silicone RTV Adhesion Tests

There are two ways to bond a RTV adhesive to a substrate: molecular bonding and mechanical bonding. In many cases, adhesion occurs as a result of a combination of the two methods. In both methods, surface wetting is essential for obtaining ultimate bond strength.

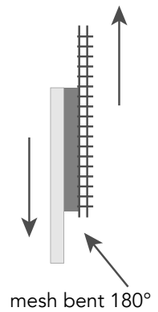


Lap Shear Adhesion Test

Lap Shear Test: Momentive Test Method E-62, a modified version of ASTM C-961

Typical Substrates: Aluminum Alloy Al clad 2024-T3 & Wire Mesh, Stainless Steel type 304, 20 mesh with a 50 psi minimum tensile.

Description: Apply RTV on to Aluminum, embed mesh into RTV. Cure according to QC process and holding jig configuration.

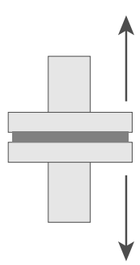


Peel Adhesion Test

Peel Adhesion Test: Momentive Test Method C-628, a modified version of ASTM C-794.

Typical Substrates: Aluminum Alloy, Alclad 2024-T3 (Anodized Aluminum Alloy, Polycarbonate, and Polyacrylate can be substituted) & Wire Mesh, Stainless Steel type 304, 20 mesh, 50 psi minimum tensile, primed with the appropriate silicone RTV primer.

Description: Apply RTV on to the Aluminum, embed mesh into RTV, cure according to QC card for each RTV, bend mesh back 180 degrees, peel. See test method for dimension specifics.



Tensile Adhesion Test

Tensile Adhesion Test: a modified version of ASTM C-1135

Typical Substrate: Anodized Aluminum Alloy, Glass

Description: Apply RTV on substrates. Cure according to QC card for each RTV. See test method for dimension specifics and holding jig configuration.

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TYPE OF CONSTURCTION MATERIAL	SEALANT AND PRIMER RECOMMENDATIONS								Surface Preparation
	IS800 Series	**RTV100 Series**	**Primer Reqd**	**RTV5220 Series**	**RTV5240 Series**	**Primer Req'd**	**RTV5810, RTV6700, RTV6800 Series**	**Primer Req'd**	
CONCRETE & MASONRY									
Brick	Do Not Use	Do Not Use	-	OK	OK	yes	OK	yes	Surfaces must be dry, sound, dust-free and free of form oils or treatments that prevent adhesion. Stiff bristle brushing, grinding or sandblasting may be required. Surfaces vary greatly from job to job and test applications are recommended to determine degree of preparation required. In some cases, primer may be required for best results.
Concrete Brick	Do Not Use	Do Not Use	-	OK	OK	*	OK	*	
Poured Concrete	Do Not Use	Do Not Use	-	OK	OK	*	OK	*	
Precast Concrete	Do Not Use	Do Not Use	-	OK	OK	*	OK	*	
Tilt-up Concrete	Do Not Use	Do Not Use	-	OK	OK	*	OK	*	
Mortar	Do Not Use	Do Not Use	-	OK	OK	*	OK	*	
Grouts	Do Not Use	Do Not Use	-	OK	OK	*	OK	*	
Cement-Asbestos (Factory Made)	Do Not Use	Do Not Use	-	OK	OK	*	OK	*	
STONE									
Granite	OK	OK	yes	OK	OK	yes	OK	yes	Surfaces must be dry and dust-free. Primer may be required. Test applications are recommended to determine surface preparation, primer need and staining potential.
Marble	Do Not Use	Do Not Use	-	OK	OK	*	OK	*	
Limestone	Do Not Use	Do Not Use	-	OK	OK	*	OK	*	
GLASS or PORCELIN									
Sheet, Float or Plate Glass	OK	OK	N.R.	OK	OK	N.R.	OK	N.R.	Surfaces must be dry and free of dust, oil or other contaminants. Detergent or soap and water treatments are not recommended. Surface should be cleaned with alcohol or other suitable solvent. The solvent used should be checked for compatibility with adjacent materials that it will contact.
Tinted Glass	OK	OK	N.R.	OK	OK	N.R.	OK	N.R.	
Reflective Glass [1]	Test	Test	N.R.	Test	Test	N.R.	Test	N.R.	
Glazed ceramic tile	OK	OK	N.R.	OK	OK	N.R.	OK	N.R.	
Percelin coated metal	OK	OK	N.R.	OK	OK	N.R.	OK	N.R.	
Vitrified surfaces	OK	OK	N.R.	OK	OK	N.R.	OK	N.R.	
PAINTS									
Acrylic Latex	OK	OK	yes	OK	OK	Yes	OK	yes	Surfaces must be clean and dry. An isopropyl alcohol wipe with clean rag is recommended. Since formulation may change, test application of material to be used on the job is recommended.
Acrylic Thermoset	OK	OK	*	OK	OK	*	OK	*	
Alkyd Latex	OK	OK	*	OK	OK	*	OK	*	
Alkyd Enamel	OK	OK	*	OK	OK	*	OK	*	
Silicone Alkyd	OK	OK	*	OK	OK	*	OK	*	
Silicone Acrylic	OK	OK	*	OK	OK	*	OK	*	
Polyurethane	OK	OK	*	OK	OK	*	OK	*	
Polyvinyl Chloride	OK	OK	*	OK	OK	*	OK	*	
Polyvinyl Fluoride	OK	OK	*	OK	OK	*	OK	N.R.	
Kynar 500® Resin†-Based Paints (e.g. Fluropon†, Nubelar†, Dupont's DuLite 815†, PPG's Ouranar†)	OK	OK	*	OK	OK	*	OK	N.R.	

* OK- Sealant has been applied to that surface with good results. N.R. - Sealant has been found to adhere to the surface without primer.
* Test - Test application is recommended.
1. Reflective glass coatings should be tested for adhesion/compatibility with all sealants.
* For handling and safety see back page.
† Trademarks of their respective owners

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TYPE OF CONSTURCTION MATERIAL	SEALANT AND PRIMER RECOMMENDATIONS								Surface Preparation
	IS800 Series	**RTV100 Series**	**Primer Reqd**	**RTV5220 Series**	**RTV5240 Series**	**Primer Req'd**	**RTV5810, RTV6700, RTV6800 Series**	**Primer Req'd**	
PLASTICS [2]									
Acrylic Sheet	OK	OK	yes	OK	OK	N.R.	Do Not Use	Do Not Use	Surfaces must be clean and dry . Alcohol wipe w/clean rags
Polyester/Fiberglass	OK	OK	N.R.	OK	OK	N.R.	OK	yes	
Epoxy Matrix Panels	OK	OK	N.R.	OK	OK	N.R.	OK	*	
Polyester Matrix Panels	OK	OK	N.R.	OK	OK	N.R.	OK	*	
Polystyrene	OK	OK	N.R.	OK	OK	N.R.	OK	*	
Polyvinyl Chloride	Test	Test	yes	OK	OK	N.R.	OK	*	
Polyvinyl Fluoride	OK	OK	yes	OK	OK	yes	OK	*	
Polycarbonate Sheet	OK	OK	yes	OK	OK	N.R.	Do Not Use	Do Not Use	
RUBBER									
Butyl E.P.D.M.	Test	Test	yes	Test	Test	yes	Test	yes	Rubber formulations vary greatly and may contain materials that cause staining or chemical reaction. Test applications are required in each case to determine compatibility.
Neoprene	Test	Test	*	Test	Test	*	Test	*	
Polyurethane	Test	Test	*	Test	Test	*	Test	*	
Polysulfide	Test	Test	*	Test	Test	*	Test	*	
Acrylic	Test	Test	*	Test	Test	*	Test	*	
SILICONE SEALANTS									
All	OK	OK	N.R.	OK	OK	N.R.	OK	N.R.	Alcohol wipe to clean surface.
METALS									
Aluminum - Mill Finish	OK	OK	yes	OK	OK	Test	OK	yes	Surfaces must be oil and dust-free
Aluminum - Anodized	OK	OK	*	OK	OK	N.R.	OK	*	Alcohol wipe-remove oils and dust
Aluminum Lacquered	OK	OK	*	OK	OK	Test	OK	*	Alcohol wipe-remove oils and dust
Copper	Do Not Use	Do Not Use	*	OK	OK	Test	OK	*	Sand off oxide-alcohol wipe
Lead	Do Not Use	Do Not Use	*	OK	OK	yes	OK	*	Alcohol wipe-remove oils and dust
Steel - Red lead primed	OK	OK	*	OK	OK	N.R.	OK	*	Alcohol wipe-remove dust
Steel -(Bright/clean)	OK	OK	*	OK	OK	N.R.	OK	*	Alcohol wipe-remove oils and dust
Steel - Weathered	OK	OK	*	OK	OK	N.R.	OK	*	Wire brush-alcohol wipe
Steel - Stainless	OK	OK	*	OK	OK	-	OK	*	
Steel - Galvanized	Do Not Use	Do Not Use	*	OK	OK	yes	OK	*	Alcohol wipe-remove oils and dust
WOODS									
Unfinished	Do Not Use	Do Not Use	-	Do Not Use	Do Not Use	-	Do Not Use	-	Unfinished wood is not a proper surface for sealant adhesion. Wood Surfaces should be sealed with paint or other coating (See paint recommendations).
Finished	OK	OK	yes	OK	OK	yes	OK	yes	

* OK- Sealant has been applied to that surface with good results. N.R. - Sealant has been found to adhere to the surface without primer.
* Test - Test application is recommended.
2 Plastics may contain plasticizers which bleed to surface and effect adhesion. Test applications are recommended for solvent attack and adhesion and compatibility with sealants { eg: stress cracking).

Lap Shear Adhesion Text Waterford Plant Standard Test E-62 - Results Reported in psi

		Acetoxy					Alkoxy					Modified Alkoxy			
Momentive Trade Name	**Plastic**	**RTV100**	**IS800**	**RTV118**	**RTV157**	**FRV1107**	**RTV180**	**RTV182**	**RTV167**	**RTV5223**	**RTV5249**	**RTV128**	**RTV5818**	**RTV6708**	**RTV6808**
CYCOLAC T	ABS	82	65	34	166	40	30	127	207	165	92	81	116	118	110
General purpose grade, used in consumer products, not flame retardant															
CYCOLAC X15	ABS	67	90	57	98	20	50	94	185			77	113	140	102
High Heat Grade - Used in automotive applications															
GELOY XP4025	ASA, PC	55	65	46	104	25	61	120	196	135	124	56	98	129	62
Weatherable Grade, used for exterior parts in automotive application															
NORYL GTX902	Nylon/PPO	110	175	189	225	120	95	112	201			106	115	110	116
Excellent chemical resistance, paintable, high heat resistance, Automotive Grade															
CYCOLOY C111OHF	PC/ABS	75	64	59	115	80	57	108	181	184	124	126	125	122	115
High flow material used for molding very thin welled parts															
CYCOLOY	PC/ABS	84	136	155	192	140	96	104	194			112	120	130	104
General purpose for impact performance, colorable, used in computer and comm. housing and auto															
XENOY 5220	PC/PBT	135	185	183	209	200	56	133	200	176 (for 1731 grade)	128 (for 1731 grade)	103	113 (157 for 1731 grade)	133	91
Chemical resistance, high impact and mechanical used in automotive and where harsh chemical exposure is a concern.															
LEXAN 141	Polycarbonate	53	77	77	122	70	94	147	193			DO NOT USE			
General purpose work horse, varied applications, excellent impact, transparent colorable. Available in FDA and UV stable form.															
LEXAN GR1210	Polycarbonate	130	160	153	250	215	53	133	184	162	129	DO NOT USE			
Gamma radiation resistant grade, medical applications FDA & USD class 6.															
VALOX 420SEO	PBT	140	90	112	183	130	54	93	175			72	98	110	89
30% glass reinforced PE, flame retardant, very high strength, heat and chemical resistance, high load bearing for applications like electronics, small applicances, garden tools.															
VALOX 508	PBT	114	105	112	198	210	46	147	195	174 (for 310 grade)	142 (for 310 grade)	113	120 (119 for 310 grade)	133	112
30% glass reinforced PE, flame retardant, very high strength, heat and chemical resistance, high load bearing for appl., motors, alacs, auto.															
ULTEM 1000	Polyetherimide	42	12	0	56	18	6	26	21	91	107	108	113	127	108
Clear amber, high temp and chemical resistance, high level work horse, Used in medical and elecs., also FDA and USP class 6, food proc. Equip.															
NORYL 731	PPO	85	132	102	191	200	62	80	193	171	137	47	92	97	53
Unreinforced, general purpose grade. Used as a raw material for compounders and water pumps due to the low water absorption rate.															
NORYL N190X	PPO	102	157	102	176	165	57	87	164			50	97	120	62
Flame retardant grade, low water absorption, used in automotive and electronic applications.															

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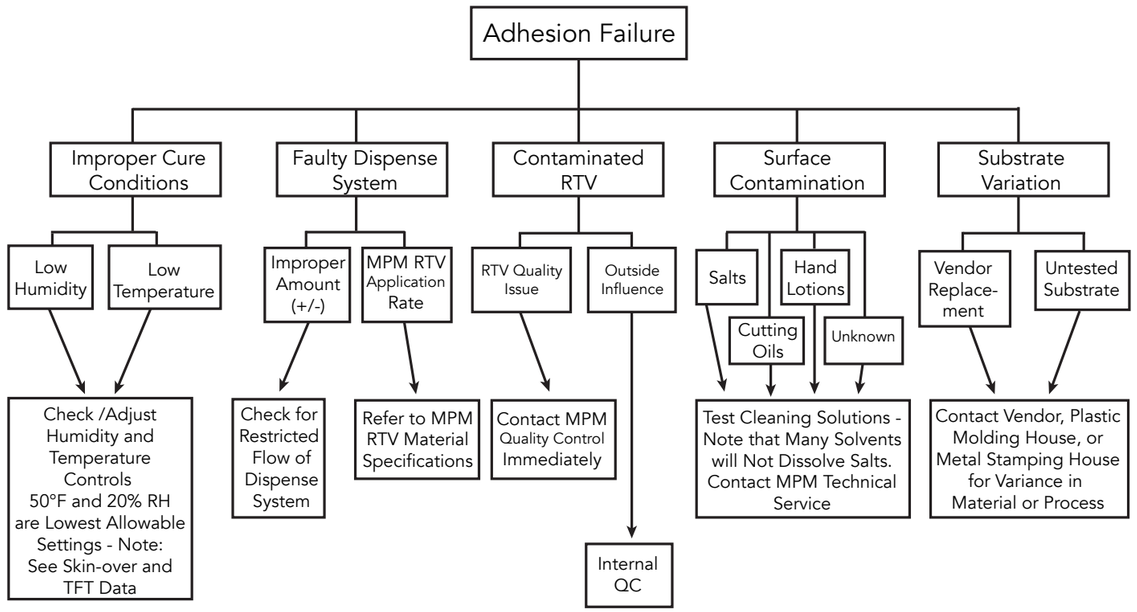
RTV ADHESION FAILURE SCENARIO & CORRECTIVE ACTION



RTV PRIMERS

Property	SS4004P	SS4044P	SS4179	SS4120	SS4155
Color	Pink	Clear	Clear	Clear	Blue
Specific Gravity	0.85	0.85	0.98	0.82	0.82
Solids Content, %	15	15	6	3	10
Solvents	Acetone, IPA, Toluene, n-Butanol	Acetone, IPA, Toluene, n-Butanol	Ethyl, Acetate, Toluene, Methanol	Ethanol, Methanol	Mineral Spirits
Flash Point	10°F	10°F	27°F	31°F	98°F
Dry Time, Minutes	60	60	15	60	60
Used with RTV	1 & 2 Part, Room Temp Cure	1 & 2 Part, Room Temp Cure	1 Part, Room Temp Cure	1 & 2 Part Heat Cure	1 & 2 Part Room Temp or Heat Cure
Notes	general purpose, dye used for visual aid upon coating	general purpose, FDA compliant	design for plastic priming	general purpose, FDA compliant	general purpose, 40+% RH required, dye used for visual aid upon coating
FastFax CDS # (dial 800-818-7329)	1532	1532	1532	1873	1873

PRODUCT DESCRIPTION

SS4004P, SS4044P and SS4179 primers are formulated for use with Momentive one-component silicone rubber adhesive sealants to promote adhesion to difficult-to-bond substrates. 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 stainless steel, brass, and galvanized metals, porous materials, unglazed ceramics and wood. SS4004P primer is bright pink, providing easy visual determination of uniform coating. Translucent SS4044P primer is identical to SS4004P primer, but is designed for applications where discoloration of the substrate is undesirable.

SS4 1 79 primer helps promote adhesion of GE Silicones sealant to difficult-to-bond plastic substrates including:

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

KEY PERFORMANCE PROPERTIES

- One-component
- Dry at room temperature and ambient humidity conditions
- SS4004P primer is bright pink
- SS4044P and SS4179 primers are transparent

TYPICAL PRODUCT DATA

Property	SS4004	SS4044	SS4179
Color	Pink	Clear, Colorless	Clear, Colorless
Specific Gravity	0.85	0.85	0.98
Solids Content, %	15	15	6
Solvent(s)	Acetone Isopropenol Toluene N-butanol	Acetone Isopropenol Toluene N-butanol	Ethyl Acetate Toluene Methanol
Flash Point, (Pensky-Martin Closed Cup)	-12C (10F)	-12C (10F)	-3C (27F)
Dry Time, Minutes	60	60	15

SPECIFICATIONS

Typical product data values should not be used as specifications. Assistance and specifications are available by contacting Momentive at 800-255-2392.

INSTRUCTIONS FOR USE

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.

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 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 SS4004P and SS4044P primers, a drying time of one hour at room temperature is recommended prior to application of the RTV silicone rubber adhesive sealant. On porous surfaces, a second coat of primer may be required, allowing at least one hour 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.

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.

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HANDLING & SAFETY

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

STORAGE WARRANTY PERIOD

The warranty period of SS4179 is six months; SS4004P and SS4044P is 12 months from date of shipment from Momentive if stored in the original unopened container at 27C (80F). Containers must be kept tightly closed when not in use. A slight precipitate may form in storage. This in no way harms the product. Do not shake the container prior to use, but carefully decant the clear primer from the top of the container as needed.

FDA STATUS

SS4044P can be used in food contact applications where FDA regulations apply. Reference Momentive bulletin (4319) "Food Contact Applications Silicone Rubber Compounds", for specific regulations, limitations and conditions of use.

AVAILABILITY

SS4004P, SS4044P and SS4179 primers may be ordered from Momentive, or an authorized GE Silicones product distributor.

GOVERNMENT REQUIREMENT

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

PRODUCT DESCRIPTION

SS4004P, SS4044P, SS4120, and SS4155 silicone primers are used with Momentive two-component RTV silicone rubber compounds when an adhesive bond is required between the silicone rubber compound and a non-silicone surface. All primers are one-component products and are supplied ready to use as pourable solvent solutions.

KEY PERFORMANCE PROPERTIES

- One component - no mixing
- Simple handling procedures and equipment for easy use and low processing cost
- Bright pink color of SS4004P primer and blue color of SS4155 primer permit easy visual determination of uniform
- Transparency of SS4120 primer preserves visibility with colorless RTV615 , RTV655, RTV6156, RTV6157, RTV6166, RTV6166, RTV6186, and RTV6196 products

APPLICATIONS

As indicated in the table on the overleaf, Momentive primers are recommended for use with specific two-component RTV silicone rubber compounds. The primers may be used to bond these silicone products to metals (such as aluminum, copper, steel, and stainless steel), ceramics, glass, some rigid plastics, and wood. Typically, adhesive strengths of 0.7 to 1.8 kg/gm (4 to 10 lbs/in.) in a peel configuration and 14 to 42 kg/cm2 (200 to 600 psi) in lap shear may be developed.

INSTRUCTIONS FOR USE

All surfaces to be bonded should first be thoroughly cleaned with a suitable solvent such as naphtha or methyl ethyl ketone (MEK) to remove dirt, oil and grease. When practical, surfaces should be wiped dry before application of the primer coating. Abrasion of the surface will often improve adhesion.

Primers may be applied by brushing, wiping, or dipping (spraying may sometimes produce erratic results). A thin, uniform primer coat of approximately 0.01 to 0.02 mm (0.5 mil) thickness usually provides the strongest bond. A drying time of one hour at room temperature is recommended prior to application of the RTV silicone rubber compound. On porous surfaces, a second coat of primer may be required. Allow at least one hour drying time between coats.

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

TYPICAL PRODUCT DATA

Properties	SS4004P	SS4044P	SS4120	SS4155
Color	Pink	Light Yellow	Clear, Colorless	Blue
Silicone Contents, %	15	16	3	10
Specific Gravity	0.86	0.86	0.82	0.82
Solvents	Acetone Isopropanol Toluene	Acetone Isopropanol Toluene	Ethanol Methanol	Mineral Spirits
Dry Time, hrs.	1	1	1	1
Flash Point, °C (°F)	-12 (10)	-12 (10)	-0.5 (31)	37 (98)
D.O.T. Label	Flammable	Flammable	Flammable	Flammable

Typical product data values should not be used as specifications.

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PRIMER RECOMMENDATION TABLE

RTV Silicone Rubber Compound	Primers Primary	Recommended Alternates
RTV11 through 88	SS4004P	SS4044P, SS4155
RTV500	SS4004P	SS4044P, SS4155
RTV615, 655	SS4120	SS4155
RTV627	SS4155	SS4120
RTV630	SS4155	SS4120
RTV6156, RTV6157 RTV6166, RTV6186 RTV6196	SS4120	SS4155
RTV8000 Series	SS4004P	SS4044P

HANDLING AND SAFETY

Material Safety Data Sheets are available upon request from Momentive. Similar information for solvents and other chemicals used with Momentive 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 12 months from date of shipment from Momentive if stored in the original unopened container at 27°C (80°F) or below. A slight precipitate may form. This may 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.

FDA STATUS

SS4044P and SS4120 primers can be used in food contact applications where FDA regulations apply. Refer to (4319), "Silicone Rubber for Food Contact Applicati ons", for specific regulations, limitations and conditions of use.

AVAILABILITY

Products may be ordered from Momentive, or an authorized Momentive distributor.

GOVERNMENT REGULATION

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

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Patent Status

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

Limitations

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

Product Safety, Handling and Storage

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.

Customer Service Centers

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