

RTV6424

HEAT-CURING SILICONE ADHESIVE

Product Description RTV6424 silicone adhesive is a one-component heat curable silicone adhesive sealant which will bond to many substrates without a primer and which will cure rapidly at elevated temperatures. This product has a very long working time at room temperature. It will not cure completely until exposed to elevated temperatures.

RTV6424 is a white, paste like product with little vertical flow.

Key Performance Properties

- One component product - no mixing required
- Fast cure at elevated temperature
- Primerless adhesion to many types of substrates
- No cure by-product, low linear shrinkage
- Non-corrosive to metals and sensitive substrates
- Excellent dielectric properties
- Outstanding performance over a wide temperature range

Typical Product Data

Uncured Properties		
Colour		White
Specific Gravity	g/cm ³	1.17
Vertical Flow @ 5 mins.	mm	50
Application Rate	g/minute	150
Cured Properties (cured 1 hour at 150°C)		
Durometer	Shore A	30
Elongation	%	550
Tensile Strength	MPa	4.6
Tear Strength Die B	kN/m	14
Adhesion, (Al to Al)	MPa	2.0
Dielectric Strength	kV/mm	20
Dielectric Constant		2.9
Dissipation Factor		0.003
Volume Resistivity	ohm·cm	1 x 10 ¹⁵

Specifications Typical product data values should not be used as specifications. Assistance and specifications are available by contacting Momentive performance materials Technical Service RTV1 and RTV2.

Instructions for Use **Compatibility**

RTV6424 silicone adhesive will cure in contact with most clean, dry surfaces. However, certain materials, such as butyl and chlorinated rubber, sulfur-containing materials, amines, and certain metal soap cured RTV silicone rubber compounds can cause cure inhibition. Cure inhibition is characterized by a gummy appearance of the RTV6424 silicone adhesive at the interface between the adhesive and the substrate to be bonded. It is recommended that a sample patch test be performed with the RTV6424 silicone adhesive to determine substrate compatibility.

Surface Preparation

The adhesive performance of any polymer system is highly dependent upon proper surface preparation. In order to maximize the adhesion of RTV6424 silicone adhesive and minimize the potential for cure inhibition, all parts should be as clean and dry as possible prior to the application of the adhesive.

Bonding

RTV6424 silicone adhesive offers outstanding adhesion characteristics to a wide variety of different substrates without the need of a primer. For difficult-to-bond-to substrates, or where more aggressive chemical adhesion is desired, the adhesion may be enhanced by using SS4155 silicone primer, available from Momentive performance materials. To apply the primer, thoroughly clean the surface and let dry. Then apply a uniform film (0.01-0.02 mm) of SS4155 silicone primer and allow the primer to air-dry for one hour or more.

Curing

RTV6424 silicone adhesive requires elevated temperatures in order to achieve full cure. Typical cure times and temperatures are as follows:

Temperature	Cure Time
100°C	N/A
125°C	45 minutes
150°C	30 minutes

The actual cure time is affected by such things as cross-sectional thickness of the RTV6424 silicone adhesive, heat capacity of the overall assembly and efficiency and type of oven used (i.e. convection, infrared)

Handling and Safety

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

CAUTION

RTV6424 silicone adhesive can generate flammable hydrogen gas upon contact with acidic, basic, or oxidizing materials. Such contact should be avoided.

Storage and Warranty Period

The warranted shelf life will be indicated by the 'use before date' on the associated documents with a minimum of 4 month when stored in the original unopened containers between 1 and 10 °C

Availability

RTV6424 is available in 150 ml cartridges.



PRINCIPAL LOCATIONS – Regional Information

North America	World Headquarters 187 Danbury Road Wilton, CT 06897, USA	T 800.295.2392	F 607.754.7517
Latin America	Rodovia Eng. Constancio Cintra, Km 78,5 Itatiba, SP – 13255-700, Brazil	T +55.11.4534.9650	F +55.11.4534.9660
Europe, Middle East, Africa and India	D-51368 Leverkusen Germany	T 00.800.4321.1000 T +31.164.293.276	F +31.164.241.750
Pacific	Akasaka Park Building - 5-2-20 Akasaka Minato-ku, Tokyo 107-6112 Japan	T +81.3.5544.3100	F +81.3.5544.3101

CUSTOMER SERVICE CENTERS

North America	Charleston, WV 25314, USA E cs-na.silicones@momentive.com		
	• Specialty Fluids	T 800.523.5862	F 304.746.1654
	• UA, Silanes, Resins, and Specialties	T 800.334.4674	F 304.746.1623
	• RTV Products-Elastomers	T 800.332.3390	F 304.746.1623
	• Sealants and Adhesives & Construction	T 877.943.7325	F 304.746.1654
Latin America	E cs-la.silicones@momentive.com		
	• Argentina & Chile	T +54.11.4862.9544	F +54.11.4862.9544
	• Brazil	T +55.11.4534.9650	F +55.11.4534.9660
	• Mexico & Central America	T +52.55.5899.5135	F +52.55.5899.5138
	• Venezuela, Ecuador, Peru, Colombia, & Caribbean	T +58.212.285.2149	F +58.212.285.2149
Europe, Middle East, Africa and India	E cs-eur.silicones@momentive.com	T 00.800.4321.1000 T +31.164.293.276	F +31.164.241750
	E cs-ap.silicones@momentive.com		
Pacific	• Japan	T +81.276.20.6182	
	• China	T +86.21.5050.4666 (ext. 1523)	
	• Korea	T +82.2.6201.4600	
	• Singapore	T +65.6220.7022	
Worldwide Hotline	Worldwide Web www.momentive.com	T 800.295.2392 T +607.786.8131	F +607.786.8309

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