

Silopren* Gel 6209

2 Part RTV Gel for Potting

Product Description

The Silopren Gel 6209 is a two-component low viscosity silicone gel designed for electronic potting applications. This product cures at room temperature to a soft, tacky gel used to protect delicate electronic assemblies from humidity, dirt and vibration. Silopren Gel 6209 is a kit matched clear, colorless product, which is very easily pourable due to its viscosity of approximately 800 mPa.s.

Key Performance Properties

- Convenient 1:1 by weight mixing ratio
- Solventless room temperature vulcanizing
- Transparent and dimensionally stable
- Mechanical shock/ vibration damping properties
- Low viscosity

Application

The Silopren Gel 6209 is specially developed for electronic potting applications such as hybrid IC insulation, potting of power modules and potting of cable joints

Typical Product Data

Uncured Mixed Properties		A	B
Colour		Translucent	Translucent
Viscosity @ 23°C Bohlin	mPa·s	900	600
Pot Life @ 23°C	min	60	

Cured Properties 1hr at 100°C		
Penetration, ¼ cone	1/10mm	90
Density	g/cm ³	0.98
Dielectric Properties		
Dielectric strength	kV/mm	20
Dielectric constant @ 60 Hz		2.8
Dielectric Loss Factor @ 60Hz		0.001
Volume Resistivity	ohm.cm	1.0 x 10E15
Thermal Properties		
Thermal Conductivity	W/m.k	0.17
Volume Expansion	1/°C	1.0 x 10E-3

Specifications

Typical product data values should not be used as specification. Assistance and specifications are available by contacting Momentive Performance Materials Technical Service RTV.

Instructions for Use

Mixing:

The Silopren Gel 6209 is a kit-matched product. As such, pot life, cure time and final cure properties can only be assured if the batch numbers on the A component and B component are identical and the material is mixed at a ratio of 1:1 (by weight)

Select a clean mixing container 4-5 times larger than the volume of the silicone gel to be used. Weigh out equal amounts of the A and B components. With clean tools, thoroughly mix the A and B components together, scraping the sides and bottom of the container carefully to produce a homogeneous mixture. Care should be taken to minimize the amount of air entrapment. A vacuum of 10 – 20 mbar can be used to remove entrapped air from the uncured mixture. For use in continuous or high volume production environments, the use of automatic meter/mix dispensing equipment is advised.

When using power mixers, avoid excessive speeds, which could cause overheating of the mixture resulting in shorter pot life

Compatibility:

The Silopren Gel 6209 will cure when applied to a clean, dry surface, which has been properly prepared. Certain materials such as butyl and chlorinated rubber, sulfur containing materials, amines and certain metal soap-cured RTV silicon rubber compounds can cause cure inhibition. Cure inhibition is characterized by a gummy appearance of the silicone at the interface between the silicone and the substrate.

Handling and Safety

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

Storage and Warranty Period

The shelf life will be indicated by the 'use before date' on the associated documents with a minimum of 4 months when stored in the original unopened containers at temperatures of 43°C or below.

Availability

The material is commercially available in pail kits of 37 kg.



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. Constâncio 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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