

## Dow Corning® MG-2XXX Silicone Adhesives

*Dow Corning® MG-2401 Silicone Adhesive*

*Dow Corning® MG-2402 Silicone Adhesive*

*Dow Corning® MG-2502 Silicone Adhesive*

### FEATURES & BENEFITS

- Pressure sensitive adhesives
- Solvent based
- Non-sensitizing
- Non-irritating
- Low viscosity materials, coatable using conventional tape coating equipment

### COMPOSITION

- Adhesives in solvent

Solvent based silicone pressure sensitive adhesives

### APPLICATIONS

*Dow Corning® MG-2XXX Silicone Adhesives* may be used where a non-sensitizing adhesive is needed to adhere medical devices to the body. Known applications include:

- Adhering ileostomy and colostomy appliances
- Attaching appliances for patient monitoring
- Affixing surgical dressings and pads
- Adhering external prosthetic devices
- Attaching hairpiece devices

### TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

CTM <sup>1</sup>	Property	Unit	Result		
Dow Corning Silicone Adhesive					
			MG-2401	MG-2402	MG-2502
	Solvent		Hexamethyl-disiloxane	Ethyl acetate	Ethyl acetate
0086	Solid Content	%	32	64	59
0050	Viscosity at 25°C (77°F)	cP	90	2500	2000
1098	Rheology Eta* at 0.01 rad/s at 30°C (86°F)	P	2 x 10 <sup>7</sup>	2 x 10 <sup>7</sup>	5 x 10 <sup>6</sup>
	Nominal tack value		Medium	Medium	High
0964	Peel adhesion	g/cm	700	700	670
0964	Shear	kg	21	21	16

<sup>1</sup>CTM: Corporate Test Method, copies of CTMs are available on request.

### DESCRIPTION

*Dow Corning MG-2XXX Silicone Adhesives* are silicone pressure sensitive adhesives specifically designed for adhering medical devices to the body.

They are supplied as solvent based materials. They can be coated as supplied, and then will leave an adhesive layer after solvent evaporation.

## SYNTHESIS AND STRUCTURE

*Dow Corning* MG-2XXX Silicone Adhesives are produced through a condensation reaction of a silanol end blocked polydimethylsiloxane (PDMS) with a silicate resin.

The schematic diagram illustrates the adhesive's synthesis Figure 1.

## BIOCOMPATIBILITY

The adhesive solids found in *Dow Corning* MG-2XXX Silicone Adhesives are non-sensitizing, non-irritating and non-cytotoxic.

Summaries of Health Data, including conditions of tests for the biocompatibility studies, are available upon request.

## HOW TO USE

### How to apply

*Dow Corning* MG-2XXX Silicone Adhesives can be applied to a substrate, as supplied, using conventional tape coating equipment. Release liners composed of a fluoropolymer are recommended for use with these adhesives.

These solvent based silicone pressure sensitive adhesives can also be directly applied to clean substrate by brushing.

Full evaporation of the solvent should be ensured before contact with the skin is made.

### How to remove

**From the skin:** When removing dried traces of *Dow Corning* MG-2XXX Silicone Adhesives from the skin, either *Dow Corning*® MG-2001 Silicone Blend, *Dow Corning*® Q7-9180 Silicone Fluid (1.0 cSt), *Dow Corning*® TI-1050 Fluid (1.5 cSt) or USP isopropyl alcohol is recommended.

**From other surfaces:** when removing *Dow Corning* MG-2XXX Adhesives from substrates other than skin, *Dow Corning* MG-2001 Silicone Blend, *Dow Corning* Q7-9180

Silicone Fluid (1.0 cSt), *Dow Corning* TI-1050 Fluid (1.5 cSt), isopropyl alcohol, ethyl acetate or heptane is recommended.

Some of these solvents may cause skin irritation and are highly flammable; appropriate precautions should be taken. They may also deteriorate certain substrates, such as some plastics, and should be used with appropriate precautions.

When removing *Dow Corning* MG-2XXX Silicone Adhesives from a substrate, and more particularly from skin, apply the appropriate solvent liberally to a clean cloth or gauze pad and wipe the surface clean. Reapplication may be necessary if the residual adhesive layer is heavy.

### Precautions

The solvent carriers used in these silicone pressure sensitive adhesives are flammable liquids with low flash points and must be handled with care:

- *Dow Corning* MG-2401 Adhesive contains hexamethyldisiloxane that has a flash point of 0.6°C (33.1°F)
- *Dow Corning* MG-2402 Adhesive and *Dow Corning* MG-2502 Adhesive contain ethyl acetate that has a flash point of -4°C (24.8°F)

Avoid handling the products near open flame or heat sources. Bound or ground containers to prevent static electrical discharge.

## MANUFACTURING ENVIRONMENT

These products are manufactured, tested and packaged under strict quality control guidelines at the Healthcare Industries Materials Site (HIMS, Hemlock MI). The HIMS is dedicated to the production of silicone materials for healthcare applications.

*Dow Corning* is globally registered to the ISO 9001 Quality Standard. Certification to ISO 9001 through an independent party indicates that *Dow Corning* operates a quality

management system in accordance with the standard, ensuring appropriate documentation and traceability.

**HANDLING PRECAUTIONS**  
**PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW CORNING WEBSITE AT DOWCORNING.COM, OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CORNING CUSTOMER SERVICE.**

## USABLE LIFE AND STORAGE

When stored at or below 25°C (77°F) in the original unopened containers, these products have a usable life of 72 months from the date of production.

## PACKAGING INFORMATION

These products are typically supplied in 16 kg (35 lb) pails and 180 kg (397 lb) drums, net weight.

Samples are available in 0.45 kg (1 lb) bottles.

## LIMITATIONS

These products are neither tested nor represented as suitable for specific pharmaceutical use.

It is the user's role responsibility to ensure that their intended use of these materials complies with all regulatory and legal requirements applicable to such use in each relevant jurisdiction including targeted geographic regions of manufacture and supply.

## HEALTH AND ENVIRONMENTAL INFORMATION

To support customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, [dowcorning.com](http://dowcorning.com) or consult your local Dow Corning representative.

## LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because

conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

**TO THE FULLEST EXTENT PERMITTED BY APPLICABLE**

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**DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

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**Figure 1: Diagram of Dow Corning® MG-2XXX Adhesives synthesis**

