

Dow Corning[®] MG-2410 Silicone Adhesive

FEATURES & BENEFITS

- Pressure sensitive adhesive
- Solventless
- Hot melt capability
- Non-sensitizing
- Non-irritating
- Softens upon heating, then cools to a nearly flowless state

COMPOSITION

- Solid adhesive

Hot melt silicone pressure sensitive adhesive

APPLICATIONS

Dow Corning[®] MG-2410 Silicone Adhesive may be used where a non-sensitizing adhesive is needed to adhere medical devices to the body and where a solvent carried adhesive is not desirable. 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 ¹	Property	Unit	Result
CTM 0208	Solid Content	%	100
CTM 0874	Melt viscosity at 185°C (365°F)	cP	30,300
CTM 1098	Rheology Eta* at 0.01 rad/s at 30°C (86°F)	P	4 x 10 ⁵
	Nominal tack value		Very high
CTM 0964	Peel adhesion	g/cm	590
CTM 0964	Shear	kg	9

¹CTM: Corporate Test Method, copies of CTMs are available on request.

DESCRIPTION

Dow Corning MG-2410 Silicone Adhesive is a hot melt silicone pressure sensitive adhesive specifically designed for adhering medical devices to the body.

It is supplied as a solid resinous material. It can be melted for coating, and then will return to a generally flowless state upon cooling.

SYNTHESIS AND STRUCTURE

Dow Corning MG-2410 Silicone Adhesive is produced through a condensation reaction of a silanol end blocked polydimethylsiloxane (PDMS) with a silicate resin. The addition of a polydimethylsiloxane plasticizer to the condensate provides the adhesive's hot melt characteristics.

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

BIOCOMPATIBILITY

Dow Corning MG-2410 Silicone Adhesive is non-sensitizing, non-irritating and non-cytotoxic.

Summary of Health Data, including conditions of tests for the biocompatibility studies, is available upon request.

HOW TO USE

How to apply

Dow Corning MG-2410 Silicone Adhesive can be applied to a substrate using conventional hot melt coating equipment. Release liners composed of a fluoropolymer are recommended for use with this adhesive.

How to remove

From the skin: When removing *Dow Corning* MG-2410 Silicone Adhesive 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-2410 Silicone Adhesive 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-2410 Silicone Adhesive 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.

MANUFACTURING ENVIRONMENT

This product is 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, this product has a usable life of 36 months from the date of production.

PACKAGING INFORMATION

This product is typically supplied in 16 kg (35 lb) pails and 180 kg (397 lb) drums or fiber packs, net weight.

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

LIMITATIONS

This product is neither tested nor represented as suitable for specific pharmaceutical use.

It is the user's role responsibility to ensure that their intended use of this material 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 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 LAW, DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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Figure 1: Diagram of Dow Corning® MG-2410 Silicone Adhesive synthesis

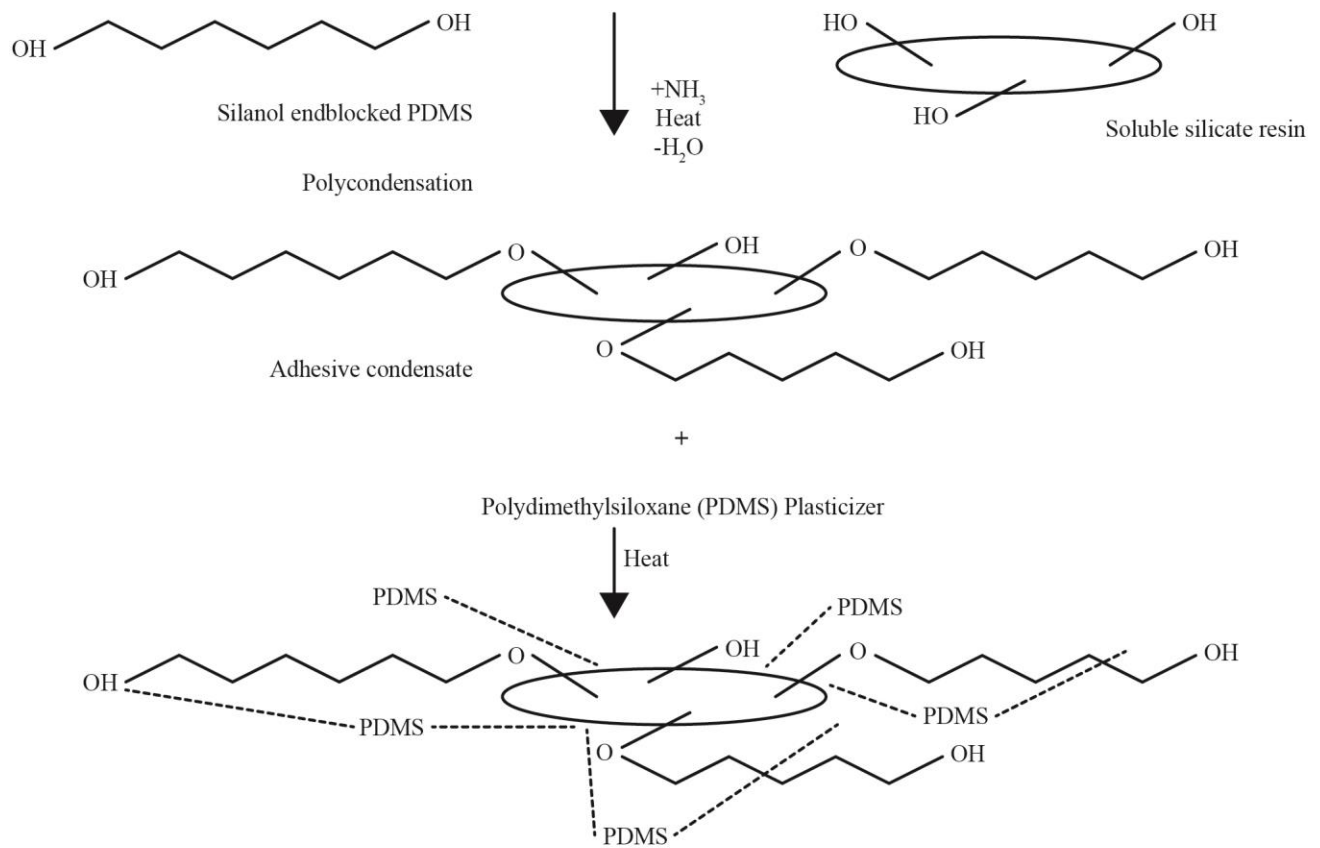


Figure 2: Complex viscosity (η^*) at 100 rad/s during dynamic temperature sweep of *Dow Corning* MG-2410 Silicone Adhesive

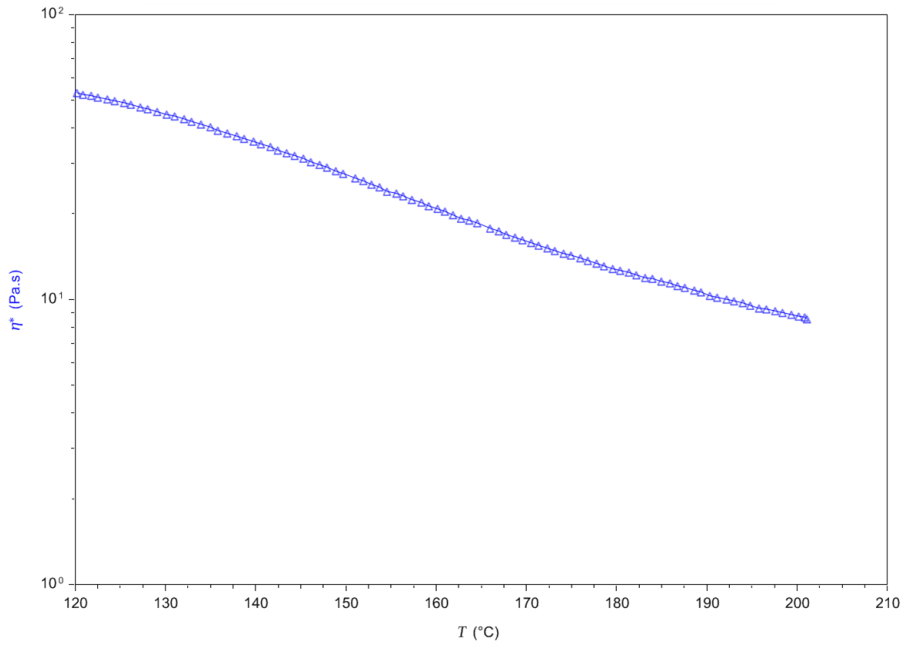


Figure 3: Complex viscosity (η^*) at 30°C during dynamic frequency sweep of *Dow Corning* MG-2410 Silicone Adhesive

