

Dow Corning[®] Soft Skin Adhesives Parts A & B

Dow Corning[®] MG 7-9800 Soft Skin Adhesive Kit (A & B)

Dow Corning[®] MG 7-9850 Soft Skin Adhesive Kit (A & B)

Dow Corning[®] MG 7-9900 Soft Skin Adhesive Kit (A & B)

FEATURES & BENEFITS

- Solventless two-part system
- Transparent before and after curing
- Platinum-catalyzed cure
- Versatile cure cycles
- No cure by-products
- Low viscosity before curing for easy processing
- Low peel release force from three levels of adhesion to skin:
 - *Dow Corning*[®] MG 7-9800 Soft Skin Adhesion (low adhesion)
 - *Dow Corning*[®] MG 7-9850 Soft Skin Adhesion (medium adhesion)
 - *Dow Corning*[®] MG 7-9900 Soft Skin Adhesion (high adhesion)
- Uses polyethylene protective release liner

COMPOSITION

- Two-part soft, fillerless, elastomeric silicone adhesives

Two-Part, Fillerless Soft Adhesive Elastomers

APPLICATIONS

- *Dow Corning* MG 7-9800 Soft Skin Adhesive, *Dow Corning* MG 7-9850 Soft Skin Adhesive and *Dow Corning* MG 7-9900 Soft Skin Adhesive are intended for adhesion to skin, including over-the-counter bandages and scar therapies.

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*	Property	Unit	Result		
			7-9800	7-9850	7-9900
0050	Viscosity Part A	mPa·s	400	2900	5100
0050	Viscosity Part B	mPa·s	400	2900	5100
1228	Penetration after cure	mm/10	95	135	140
0964A	Release**	N/2.5 cm	0.11	0.03	0.05
0964A	Adhesion***	N/2.5 cm	0.6	1.1	1.9

*CTM: (Corporate Test Method) corresponds to American Standard Test Methods (ASTM).

**Release liner: PE film

***Using Polycarbonate film

DESCRIPTION

Dow Corning[®] Soft Skin Adhesives are two-part platinum catalyzed, fillerless, silicone elastomers. The physical properties of these adhesives may be useful in producing cohesive and self-adhering materials for biomedical applications. These adhesive elastomers are based on a platinum catalyzed polydimethylsiloxane composition that will cure at a variety of temperatures, from ambient to 140°C, without the formation of by-products. The adhesive elastomer is supplied as a two-component kit that must be thoroughly blended together prior to use.

HOW TO USE

Mixing

Thoroughly mix the desired amount part A and part B in a 1:1 ratio by weight. Static mixers are recommended mixing Tools. During mixing care should be taken to minimize air entrapment. Airless mixing, metering and dispensing equipment are recommended for large production processing.

De-Airing

If a void-free finished part is desired, the entrapped air must be removed from the mixed materials. Exposure to reduce pressure of 711.2 Torr (28 inches of mercury) for several minutes is typically adequate. The

vessel containing the material should be at least four times the volume of the mixture to allow for expansion.

Curing

The cure reaction will begin once the two parts have been mixed. The initial viscosity will at least double within 1–3 hours at 25°C for the *Dow Corning* MG 7-9800 Soft Skin Adhesive. For *Dow Corning* MG 7-9850 Soft Skin Adhesive and *Dow Corning* MG 7-9900 Soft Skin Adhesive the pot life is about half an hour. If the material is not processed within this time frame, it can no longer be molded, coated or cast. Refrigeration and/or freezing may extend the pot life, but care must be taken to avoid any moisture contamination due to condensation. The cure reaction will occur at room temperature; however heating will accelerate the process. Cure conditions will depend upon the amount and thickness of adhesive to be cured. Typical cure rates monitored at 130°C are included in Figure 1 below.

Cleaning

To remove uncured adhesive, *Dow Corning*® Q7-9180 Silicone Fluid, 0.65 cSt, isopropyl alcohol, ethyl acetate, xylene or heptane can be used. When the adhesive is cured, the greater part should be removed by mechanical means and only the remaining material should be removed with one of the aforementioned solvents.

USABLE LIFE AND STORAGE

When stored at or below room temperature in the original unopened containers, *Dow Corning* Soft Skin Adhesives have a usable life of 12 months from the date of production.

MANUFACTURING ENVIRONMENT

Dow Corning Healthcare Products are manufactured under strict quality-control guidelines. The Healthcare Industries Materials Site (HIMS) in Hemlock, MI, is dedicated to the

production of silicone materials for healthcare applications. It is registered with the FDA (CFN 1816403) as a Drug Establishment. The site quality system is based on principles of current Good Manufacturing Practices for both Bulk Pharmaceutical Products and Medical Devices. The site is ISO 9001 registered with BSI.

BIOCOMPATIBILITY

Toxicological summaries are available upon request.

IMPORTANT INFORMATION

It is the user's responsibility to ensure the safety and efficacy of this material for all intended uses. *Dow Corning* makes no end use representation regarding any safety testing we may have conducted on this material. The product is not designed for, intended for and therefore not suitable for implantation of any duration in the human body.

PACKAGING INFORMATION

For feasibility testing, this product is available in 908 g sample kits, each containing equal portions of Part A and Part B. Commercial quantities are supplied in pail, drum or tote size kits, containing equally sized A and B components.

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.

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.

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LIABILITY FOR ANY
INCIDENTAL OR
CONSEQUENTIAL DAMAGES.**

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Figure 1: Cure rates of Dow Corning MG 7-9800 Soft Skin Adhesive, Dow Corning MG 7-9850 Soft Skin Adhesive and Dow Corning MG 7-9900 Soft Skin Adhesive at 130°C.

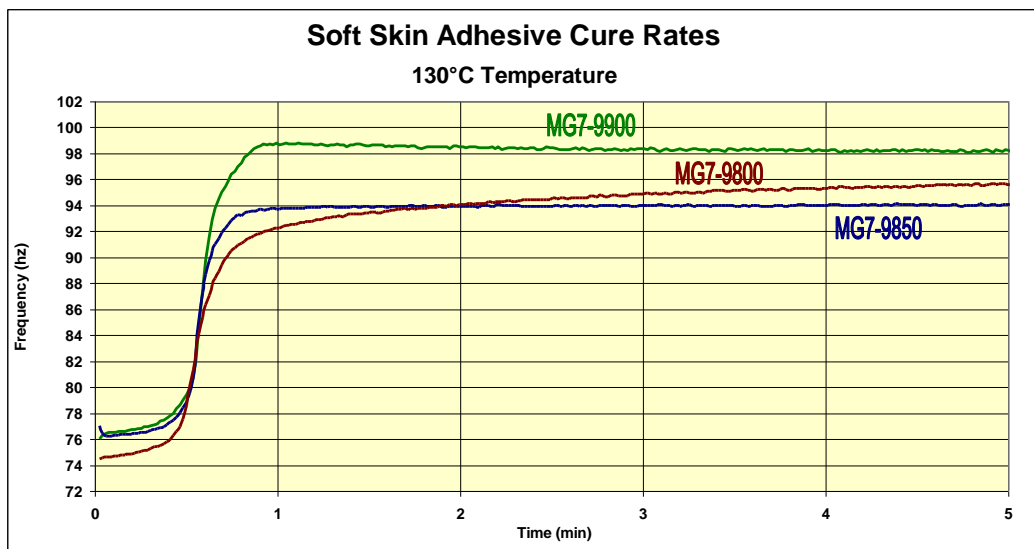


Figure 2: Correlation of Coat Weight to Adhesion for Dow Corning MG 7-9800 Soft Skin Adhesive, Dow Corning MG 7-9850 Soft Skin Adhesive and Dow Corning MG 7-9900 Soft Skin Adhesive

