Product Information Healthcare



DOW CORNING® 7-9700 Soft Skin Adhesive Parts A and B

Two-Part, Fillerless Soft Adhesive Elastomer

- · Solventless two-part system
- · Transparent before and after curing
- · Platinum-catalyzed cure
- · Versatile, temperature controlled cure cycles

BENEFITS

FEATURES

- · Low peel release force from skin
- · Non-sensitizing/Non-irritating
- · Non-cytotoxic
- May utilize a polyethylene protective release liner

COMPOSITION

Two-part soft, fillerless, elastomeric silicone adhesive

APPLICATION

• DOW CORNING 7-9700 Soft Skin Adhesive Parts A and B is 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 representative prior to writing specifications on this product.

| CTM ¹ | Property | Unit | Result 7-9700 |
|------------------|---|---------|------------------|
| | Solid content | % | 100 |
| 0050 | Viscosity, part A | mPa.s | 500 |
| 0050 | Viscosity, part B | mPa.s | 320 |
| 0055 | Pot Life (RVT#3, 50rpm at 25°C/77°F) ² | minutes | 133 |
| 1228 | Penetration after cure (62.5g cone) | mm/10 | 90 |

- 1. CTM: (Corporate Test Method) corresponds to American Standard Test Methods (ASTM). Copies of CTM's are available upon request.
- 2. Pot life is defined as the time interval between mixing the Part A and Part B together, and this mixture attaining a viscosity that prevents further manipulation of the gelled material. Typically, this viscosity is approximately, 200,000 mPa.s.

DESCRIPTION

DOW CORNING 7-9700 Soft Skin Adhesive is a two-part platinum catalyzed, fillerless, silicone elastomer. The physical properties of this adhesive may be useful in producing cohesive and self-adhering materials for biomedical applications. This adhesive elastomer is based on a

platinum catalyzed polydimethylsiloxane composition that will cure at a variety of temperatures, from ambient to 140°C (284°F), without the formation of by-products.

The adhesive elastomer is supplied as a two-component kit that must be thoroughly blended together prior to

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 is 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 a residual pressure of 45 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.

Coating

The suggested coating method is knife over roll. Suggested coating thickness is from 0.1mm to 0.5mm (approximately 100g/m²–500g/m²). Thicker coats can be applied if more elastomeric properties are desired.

Curing

The cure reaction will begin once the two parts have been mixed. The initial viscosity will at least double within 1 hour at 25°C (77°F). The cure reaction will occur at room temperature; however heating will accelerate the process. A typical graph of the viscosity change as the material cures is included in Figure 1 (page 3).

Cleaning

To remove uncured adhesive, DOW CORNING® Q7-9180 (0.65cst) Silicone Fluid, 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.

MANUFACTURING ENVIRONMENT

This product is manufactured, tested and packaged to ISO 9001:2000 Standards. Dow Corning is globally registered to the ISO 9001:2000 Quality Standard. This certification through an independent party indicates that Dow Corning operates a quality management system in accordance with the ISO 9001:2000 Quality Standard, ensuring appropriate documentation and traceability for all the products Dow Corning sells.

BIOCOMPATIBILITY

Toxicological profiles are available upon request.

IMPORTANT INFORMATION THE USER'S ATTENTION IS IN PARTICULAR DRAWN TO THE FOLLOWING STATEMENT:

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.

HANDLING PRECAUTIONS

Product safety information required for safe use is not included. Before handling, read product and safety data sheets and container labels for safe use, physical and health hazard information. The material safety data sheet is available on the Dow Corning website at www.dowcorning.com. You can also obtain a copy from your local Dow Corning sales representative or Distributor or by calling your local Dow Corning Global Connection.

USABLE LIFE AND STORAGE

When stored at or below room temperature in the original unopened containers, this product has a usable life of 12 months from the date of production.

PACKAGING

Samples are available in 0.9kg (2 lb.) kits. Each kit contains equal portions of part A and part B. Commercial volumes of these products are supplied in 30kg pail kits and 400kg drum kits.

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, www.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 customers' tests to ensure that Dow Corning's 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 the product will meet the Dow Corning 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.

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. The Viscosity changes of DOW CORNING 7-9700 Soft Skin Adhesive (A and B) at selected temperatures.

