

DOW CORNING® 7093 Adhesive/Sealant

Low modulus neutral cure silicone adhesive/sealant

FEATURES

- One-component adhesive/sealant
- Cures at room temperature when exposed to moisture in the air
- · Alkoxy cure system
- · Non-sag, paste consistency
- · Easy to apply
- Low modulus for high movement capability
- · Good adhesion to many substrates
- Stable and flexible from -50°C (-58°F) to +180°C (+356°F)

APPLICATION

• General industrial sealing and bonding applications where non-corrosive cure is required.

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* ASTM*	Property	Unit	Value
	As supplied		
	Appearance		Non-slump paste
	Colors		White, black, gray
0098	Skin-over time	minutes	15
0364	Extrusion rate ¹	g/minute	210
0095	Tack-free time	minutes	28
0062	Flow (MIL-S-8802 Jig)	cm	0.08
	Mechanical properties, cured 7 days in relative humidity	air at 25°C	(77°F) and 50%
0022 D 792	Specific gravity		1.5
0099 D2240	Durometer hardness, shore A		30
0137A D412	Tensile strength	MPa	1.7
0137A D412	Modulus 100%	MPa	0.43
0137A D412	Elongation at break	%	700

^{1.} Extrusion rate: 3.2mm orifice at 0.62MPa.

ASTM: American Society for Testing and Materials.

HOW TO USE

Substrate preparation

All surfaces must be clean and dry. Degrease and wash off any contaminants that could impair adhesion. Suitable solvents include isopropyl alcohol, acetone or methyl ethyl ketone.

Unprimed adhesion may be obtained on many substrates such as glass, metals and most common engineering plastics. Substrates to which good adhesion is normally not obtained include PTFE, polyethylene, polypropylene and related materials.

For maximum adhesion, the use of DOW CORNING* 1200 OS Primer is recommended. After solvent cleaning apply a thin coat of DOW CORNING 1200 OS Primer by dipping, brushing or spraying. Allow primer to dry for 15 to 90 minutes at room temperature and a relative humidity of 50% or higher.

^{*} CTM: Corporate Test Method, copies of CTMs are available on request.

How to apply

Apply DOW CORNING 7093 Adhesive/Sealant to one of the prepared surfaces, then quickly cover with the other substrate to be bonded.

On exposure to moisture, the freshly applied material will "skin-over" in about 10-20 minutes at room temperature and 50% relative humidity. Any tooling should be completed before this skin forms. The surface is easily tooled with a spatula. The adhesive/sealant will be tack-free in about 30 minutes.

Cure time

After skin formation, cure continues inward from the surface. In 24 hours (at room temperature and 50% relative humidity) DOW CORNING 7093 Adhesive/Sealant will cure to a depth of about 2mm. Very deep sections, especially when access to atmospheric moisture is restricted, will take longer to cure completely. Cure time is extended at lower humidity levels.

Before handling and packaging bonded components, users are advised to wait a sufficiently long time to ensure that the integrity of the adhesive seal is not affected. This will depend on many factors and should be determined by the user for each specific application.

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 30°C (86°F) in the original unopened containers, DOW CORNING 7093
Adhesive/Sealant has a usable life of 12 months from the date of production.

As DOW CORNING 7093
Adhesive/Sealant cures by reaction with moisture in air, keep the container tightly sealed when not in use.
A plug of used material may form in the tip of a tube or cartridge during storage. This is easily removed and does not affect the remaining contents.

PACKAGING

This product is available in standard industrial container sizes. For details please refer to your Dow Corning sales office.

LIMITATIONS

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

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.

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