

#### **Technical Data Sheet**

#### DOWSIL™ 7094 Flowable Sealant

One component, flowable neutral cure silicone adhesive/sealant

# Features & Benefits

- One component adhesive/sealant
- Cures at room temperature when exposed to moisture in the air
- Alkoxy cure system
- Flowable and self-leveling
- Easy to apply
- Excellent unprimed adhesion to many substrates
- Stable and flexible from -50°C to +180°C
- Non-corrosive to metals
- Low odor
- Unprimed adhesion to mixed substrates

# Composition

Silicone Adhesive/Sealant

# **Applications**

- Sealing and bonding application where low viscosity and self-leveling properties in combination with non-corrosive cure is required
- Designed for applications which demand a strong but flexible bond such as when bonding materials with differing thermal expansion rates e.g., glass to metal or glass to plastic
- Low modulus formulation for high movement capability
- Sealing in gaps where an elastic grouting is required

#### Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

CTM <sup>1</sup>	Property	Unit	Result
	As supplied		
	Appearance		Black or White, viscous liquid
0097B	Density	g/cm <sup>3</sup>	1.30
0050	Viscosity	mPa⋅s	28,000
0098	Skin-over-time (23°C, 50% R.H.)	min	25
0095A	Tack-free-time (23°C, 50% R.H.)	min	50

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

# Typical Properties (Cont.)

СТМ	Property	Unit	Result
	Mechanical properties, cured 7 days in air at 23°C and 50% R.H.		
0137A	Tensile strength	mPa	1.2
0137A	Elongation at break	%	400
0137A	Modulus @ 100%	mPa	0.36
0099	Hardness, Shore A		19

# Description

DOWSIL™ 7094 Flowable Sealant is a black or white, viscous liquid, low modulus silicone adhesive/sealant designed for applications where a flowable product and non-corrosive cure with durable adhesion to a variety of substrates is required. The flowable properties allow spray-applications by airless pumps.

#### 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 by on many substrates such as glass, metals (e.g. steel, aluminum) and most common engineering plastics (e.g. polyamide, polycarbonate). Adhesion may be less successful on some low energy plastics such as polyethylene, polypropylene and PTFE.

#### How to apply

DOWSIL 7094 Flowable Sealant is ready to use. Apply a suitable amount of DOWSIL 7094 Flowable Sealant to one of the prepared surfaces, and then quickly cover with the other substrate to be bonded.

On exposure to moisture, the freshly applied material will "skin over" in about 25 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 50 minutes.

#### Cure time

After skin formation, cure continues inward from the surface. In 24 hours at room temperature and 50 % relative humidity, DOWSIL 7094 Flowable Sealant will cure to a depth of about 2 mm. Very deep sections, especially when access to atmospheric moisture is restricted, will take longer to cure completely. Cure time is very much depending on the humidity level. It is extended at lower humidity levels and accelerated at higher levels, respectively (see table below).

Condition	Relative Cure Speed
23°C, 50% R.H.	100%
15°C, 40% R.H.	70%
30°C, 60% R.H.	135%
35°C, 70% R.H.	168%

How To Use (Cont.)

Cure time (Cont.)

Before handling and packaging bonded components, users are advised to wait a sufficiently long time to ensure that the integrity of the 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 IN 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 WEBSITE AT WWW.CONSUMER.DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

Usable Life And Storage When stored below 32°C in the original unopened containers, this product has a usable life of 12 months from the date of production.

Packaging Information DOWSIL 7094 Flowable Sealant is available in various standard industrial containers. Please contact your local representative for further details.

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 has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, www.consumer.dow.com or consult your local Dow representative.

http://www.consumer.dow.com

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