



Technical Data Sheet

DOWSIL™ 700 Industrial Grade Silicone Sealant

FEATURES & BENEFITS

- Free of petroleum distillates
- Resistant to weathering
- Withstands temperature extremes; remains flexible from -76 to 350°F (-60 to 177°C) for continuous use and up to 400°F (204°C) for intermittent use
- Cures at room temperature

One-part 100% silicone RTV

APPLICATIONS

Physical Form

- Non-slumping paste

Cure

- Cured sealant stays rubbery from -76 to 400°F (-60 to 204°C)

Special Properties

- Cured sealant stays rubbery from -76 to 400°F (-60 to 204°C)

Primary Uses

- General industrial sealing and adhesive applications

TYPICAL PROPERTIES

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

Test ¹	Property	Unit	Result
As supplied			
	Color		Aluminum clear, white, black
CTM 0097	Specific Gravity		1.02
CTM 0364	Extrusion Rate	1/8" orifice 90 psi grams/minute	370
Cure Characteristics Exposed to Air at 77°F (25°C) and 50 percent RH			
CTM 0095	Tack-Free Time at 77°F (25°C) and 50 percent RH,	minutes	15
	Cure Time (1/8" bead)	hours	24
Physical Properties – As Cured 7 days at 77°F (25°C) and 50 percent RH			
CTM 0099	Durometer hardness, Shore A	points	20
CTM 0137A	Tensile Strength	psi	225
CTM 0137A	Elongation	percent	577

¹CTMs (Corporate Test Methods) correspond to standard ASTM (American Society for Testing and Materials) tests in most instances. Copies of CTMs are available upon request.

DESCRIPTION

DOWSIL™ 700 Industrial Grade Silicone Sealant is a one-part, acetoxy cure, adhesive sealant suitable for

general industrial sealing and adhesive applications. The sealant will adhere to clean metal, glass, silicone rubber and plastic surfaces.

A primer may be required for optimum adhesion to some substrates.

LISTINGS/SPECIFICATIONS

- Complies with FDA Regulation 21 CFR 177.2600 for incidental contact with food
- NSF ANSI 51 for all food contact types
- Recognized under UL QMFZ2

HOW TO USE

DOWSIL 700 Industrial Grade Silicone Sealant is supplied in ready to use form. It flows readily from its container under pressure. The paste like consistency makes it easy to work; a spatula or wooden paddle can be used to tool the surface.

Uses:

- Adhering auto trim, appliance trim and nameplates
- Sealant for compressors, gear boxes and pumps
- Bonding appliance parts and signs
- Caulking doors and windows
- Sealing out moisture

Surface Preparation

Clean and dry the surface. Remove any soap or oil. Slight abrasion of the surface will improve adhesion. Priming may be required – see primer recommendations.

Masking

Mask adjacent surfaces to ensure neat sealant lines.

Application

Apply sealant in a continuous operation by holding applicator at a 45° angle and pushing the adhesive ahead of the nozzle.

Tooling

Tool, as needed, immediately after application and before a skin forms (usually within 5 minutes).

Cleanup

Remove excessive adhesive with a dry paper towel. Remove masking as soon as tooling is completed.

PRIMER

RECOMMENDATIONS

For stronger, more uniform bonds, Primer may be applied before the Sealant.

For metals and many other substrates, DOWSIL™ 1200 OS Primer or low-VOC DOWSIL™ P5200 Adhesion Promoter is recommended. For paints, plastics and organic rubber materials use DOWSIL™ PR-1205 Prime Coat.

Follow surface preparation guidelines above and apply a thin film of Prime Coat. Allow to dry about 1 hour or until dry to the touch. Follow complete instructions provided with the primer.

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 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

Product should be stored at or below 32°C (90°F) in original, unopened containers. Shelf life is 720 days from date of manufacture.

LIMITATIONS

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

DOWSIL 700 Industrial Grade Silicone Sealant is not recommended:

- For underwater use
- On concrete or mortar
- On oily woods such as cedar, teak and cypress
- On surfaces to be painted; paints will not adhere well to sealant (paint before applying sealant)
- In totally confined areas (atmospheric moisture is required for cure)
- On Teflon® 1-coated materials, polyethylene or polypropylene
- For use on or near sensitive metals such as copper, brass, zinc, galvanized iron or magnesium (acetic acid released during cure can be corrosive especially in confined cure conditions)

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.

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

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DOWSIL™ 700 Industrial Grade Silicone Sealant

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