



Technical Data Sheet

DOWSIL™ Silicone 780 Plumbers & Roofers' Sealant

FEATURES & BENEFITS

- One-component adhesive/sealant
- Cures at room temperature when exposed to moisture in the air
- Easy to use/ease of application compared to non-silicone materials
- Cures to a tough, flexible rubber
- Good/excellent unprimed adhesion to most common construction substrates
- Resistant/outstanding resistance to ozone, UV, moisture and temperature extremes
- Stable and flexible from -40°C to +150°C
- Non-slumping; can be used in vertical and overhead joints

One part high performance neutral cure silicone sealant offering plumbing and roofing materials

APPLICATIONS

- DOWSIL™ Silicone 780 Plumbers & Roofers' Sealant adheres to a wide range of plumbing and roofing materials, like Steel, Zinc-coated Steel, Aluminum, Brick, Concrete, Ceramic, Fiberglass, Baked Enamel Surfaces, Painted Finishes, Select Plastics etc.

TYPICAL PROPERTIES

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

Property	Unit	Result	
Available colors		Translucent	Off White, Gray
<As supplied>			
Flow, Sag or Slump	mm	<2	<2
Extrusion rate *1	g/min	287	409
Tack-free time	min	17	12
In depth cure at 25°C/50%RH for 1day	mm	2.1	1.8
<As cured 7days at 25°C/50%RH>			
Density	g/cm ³	1.02	1.39
Durometer hardness, Shore A		21	38
Tensile strength	MPa	1.5	1.2
Elongation at break	%	400	450

*1: Extrusion rate: 3.2 mm orifice at 0.62 MPa.

DESCRIPTION

DOWSIL Silicone 780 Plumbers & Roofers' Sealant is high performance sealant designed for use in sealing sheet metal and aluminum roofing, flashing, guttering, wall cladding and rainwater accessories. It is a moisture curing one part neutral cure silicone rubber sealant.

degrease and wash off any contaminants that could impair adhesion. Suitable solvents include isopropyl alcohol, acetone or methyl ethyl ketone.

A primer may be needed for optimum adhesion to some substrates based on testing conducted by the end user. Information on Dow primers is available on request from Dow.

HOW TO USE

Substrate preparation

All surfaces must be clean and dry,

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

When stored below 32°C (90°F) in the original unopened containers, this product has a usable life of 540 days from the date of production.

As DOWSIL Silicone 780 Plumbers & Roofers' 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.

LIMITATIONS

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

DOWSIL Silicone 780 Plumbers & Roofers' Sealant is not recommended for:

- Do not use for structural glazing.
- Not recommended for continuous water immersion applications.
- Not recommended for use with marble and similar highly porous stone finishes where sealant may affect their appearance.

- Sealant may discolor copper and brass.
- Not recommended for expansion joints where high movement is expected.
- Not recommended for use in below-ground joints or trafficable joints where abrasion and physical abuse are encountered.
- Not recommended for use in the construction or sealing of aquariums.
- Cannot be painted, as paint will not adhere to sealant.
- Not recommended for use on polycarbonate plastic sheeting, suitability for use on other types of plastic should be tested prior to application.
- Not for use on freshly painted surfaces (enamel or solvent containing types).
- Should not be applied to materials that bleed plasticizers or solvents or release by-products that may inhibit cure, affect adhesion or discolor the sealant (e.g. bituminous-based adhesives and coatings).
- Do not clean or treat the sealant with materials, solvents or cleaning agents that may affect or discolor the sealant, particularly during sealant cure.
- Do not apply at temperatures below 4°C or when substrate surface temperatures exceed 50°C.
- Should not be used as an interior penetration fire stop sealing system.
- Should not be applied to surfaces in direct contact with food or drinking water. This sealant has not been tested to determine status under U.S. Food and Drug Administration regulations.
- Not recommended for direct contact on the reflective coatings on mirrors.

- Polyester powder coat paint exhibits a highly variable wax content on the surface. Ensure thorough solvent cleaning.
- Sealant cures by contact with moisture vapor in the air. Not recommended for use in closed or confined areas where sealant cure may be inhibited by lack of air.
- Do not use in the manufacture of insulated glass (IG) units.

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

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'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 SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

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