



DOWSIL™ 780 General Purpose Silicone

Acetoxy-cure, one-component, RTV silicone sealant

Features & Benefits

- Good adhesion to a broad range of building substrates
- Easy to use – one part, no mixing required
- Resistant to ozone, ultra-violet radiation, and temperature extremes
- General sealing and caulking applications

Applications

- DOWSIL™ 780 General Purpose Silicone is a one-part, silicone sealant suitable for many general sealing uses, designed for the use in internal and external applications.

Typical Properties

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

Test ¹	Property	Unit	Result
	Cure System		Acetoxy
CTM 663A	Cure Rate (23°C or 73°F, 50% R.H.) - 1 day	mm	1.8
	Application Temperature	°C °F	+5 to +50 +41 to +122
CTM 97B	Specific Gravity		0.96
CTM 364C	Extrusion Rate	g/minute	650
CTM 99E	Hardness (Shore A)		13

1. CTM: Corporate Test Method, copies of CTMs are available on request.

How to Use

Surface Preparation

Ensure that surfaces to be sealed are clean, dry, sound and grease-free. Clean non-porous surfaces with DOWSIL™ R-40 Universal Cleaner or methylated spirits, and dry thoroughly with a clean, oil and lint-free cloth before application of sealant.

Note: When using any solvent, always provide adequate ventilation. Avoid heat, sparks, and open flames. Use solvent resistant gloves. Observe and follow all precautions listed on solvent container label.

Masking

Areas adjacent to the joints should be masked with tape to prevent contamination of the substrates and to ensure a neat sealant line. Masking tape should be removed immediately after tooling.

How to Use

Priming

No primer is required on most surfaces. For acrylic baths, it is recommended that an adhesion test is carried out. Adhesion to plastic and metal surfaces can be improved by using a Dow primer.

Back-up Materials

When back-up material is required, a closed cell polyethylene backer rod is recommended. Low tack polyethylene tape should be used in joints too shallow to allow the use of a backer rod. Back-up materials provide back pressure and prevent three-sided adhesion that limits sealant movement capability.

Finishing

The joint should be tooled within 5 minutes of application to ensure good contact between the sealant and the substrate. Tooling of the sealant also gives a smooth, professional finish.

Clean-up

Excess sealant may be cleaned off tools and non-porous surfaces whilst in an uncured state using with DOWSIL™ R-40 Universal Cleaner. If sealant is misapplied to porous substrates, it should be left until it is just cured and then removed by peeling, cutting or other mechanical means. Care should be taken not to damage plastic or coated surfaces.

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 DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

Usable Life and Storage

When stored in cool, dry conditions below 30°C (86°F) in the original unopened containers, DOWSIL™ 780 General Purpose Silicone has a usable life of 24 months from the date of production.

Packaging Information

DOWSIL™ 780 General Purpose Silicone is supplied in 280 ml cartridges packed in boxes of 12.

DOWSIL™ 780 General Purpose Silicone is available in clear, white, champaign, grey and black.

Limitations

- Do not use for structural glazing or insulated glazing applications.
- Not recommended for continuous water immersion applications.
- 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.
- Acetoxy sealant is not recommended for use on materials where the cure by-product (acetic acid vapor) may cause corrosion or discoloration or where the sealant may affect their appearance (e.g., galvanized iron, copper, brass, zinc-coated steel and other metals; or concrete, cement, brick, limestone, marble and similar highly porous stone finishes).
- 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).

Limitations (Cont.)

- Not recommended for joints where movement exceeds the sealant's movement capability
- Do not clean or treat the sealant with materials, solvents or cleaning agents that may affect or discolor the sealant, particularly during sealant cure.
- 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.

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, dow.com or consult your local Dow representative.

Disposal Considerations

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Technical Representative for more information.

Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

dow.com

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