



DOWSIL™ C50 High Modulus Silicone Sealant

Acetoxy silicone sealant

Features & Benefits

- Specially developed for use by sealant contractors
- High modulus, high elasticity
- Fungus and mildew resistant
- 100% silicone polymer
- Resistant to ozone, ultra-violet radiation and temperature extremes
- Conforms to ISO 11600-F-20LM

Applications

- One-part sealant, developed for use by the sealant contractor
- Excellent adhesion to a range of non-porous substrates including glass, aluminum and painted wood
- Highly flexible and containing a fungicide suitable for use in sanitary applications

Typical Properties

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

Property	Unit	Result
Cure Type		Acetoxy
Working Time	minutes	5–10
Slump		Nil
Tack Free Time	minutes	20
Cure Time for 2.5 mm Depth	hours	24
Application Temperature Range	°C	+5 to +30

How to Use

Surface Preparation

Ensure that surfaces to be sealed are clean, dry, sound and free from frost. Clean all joints of release agents, water repellents, laitance, dust, dirt, old sealants and other contaminants, which could impair adhesion. Non-porous surfaces should be cleaned and degreased by wiping with a suitable solvent such as DOWSIL™ R-40 Universal Cleaner on an oil and lint-free cloth before application of the sealant. Porous substrates should be mechanically cleaned using a steel brush, sanding disc or any similar means.

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.

How to Use (Cont.)

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.

Priming

Primer is not required on most common nonporous substrates. However, a test placement prior to general use is always recommended. For specific advice, please refer to the Dow Primer Guide or contact Sherwin-Williams for technical assistance.

Back-Up Materials

Closed cell polyethylene backer rod is recommended as a back-up material to provide back pressure and avoid three-sided adhesion that limits sealant movement capability. Low tack polyethylene tape should be used in joints too shallow to allow the use of backer rod.

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 DOWSIL™ R-40 Universal Cleaner. If sealant is misapplied to porous substrates, it should be left until just cured, and then removed by peeling, cutting or other mechanical means. Care should be taken not to damage plastic or coated surfaces.

Joint Design

When designing joints using DOWSIL™ C50 High Modulus Silicone Sealant, the minimum width should be 6 mm. For joints between 6 mm–12 mm wide, a seal depth of 6 mm is required. For joints above 12 mm wide, a width to depth ratio of 2:1 should be used. In situations where fillet joints are needed, a minimum of 6 mm sealant bite to each substrate is recommended.

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

DOWSIL™ C50 High Modulus Silicone Sealant should be stored in cool and dry conditions.

When stored at or below 30°(86°F) in the original unopened container, DOWSIL™ C50 High Modulus Silicone Sealant has a useable life of 24 months from date of manufacture.

Color Range & Packaging

DOWSIL™ C50 High Modulus Silicone Sealant is available in white and clear and is supplied in 310 ml cartridges, packed in boxes of 12.

Limitations

DOWSIL™ C50 High Modulus Silicone Sealant should not be used in structural glazing or insulating glazing applications.

Do not use DOWSIL™ C50 High Modulus Silicone Sealant on bituminous substrates, substrates based on natural rubber, chloroprene or EPDM or on building materials, which might bleed oils, plasticizers or solvents. Do not use DOWSIL™ C50 High Modulus Silicone Sealant in a totally confined space because the sealant requires atmospheric moisture to cure. Because acetic acid is released during curing, it can corrode mirror silver and sensitive metals such as copper, brass and lead. DOWSIL™ C50 High Modulus Silicone Sealant is not recommended for use on submerged joints or in joints where physical abuse or abrasion are likely to occur.

DOWSIL™ C50 High Modulus Silicone Sealant is not suitable for food contact applications.

It is recommended that DOWSIL™ C50 High Modulus Silicone Sealant is not applied to surfaces that are below 5°C (41°F) as it is impossible to guarantee a dry surface at these temperatures.

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.

dow.com

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