



TBP Converting, Inc.  
Dowsil 3-0117 PDS



Technical Data Sheet

## DOWSIL™ 3-0117 Silicone Insulating Glass Sealant

### FEATURES & BENEFITS

- Excellent unprimed adhesion to glass and metal substrates, such as galvanized steel, stainless steel and aluminum
- Single-component formulation; minimizing waste and downtime by eliminating base purging and static mixer maintenance
- Consistently non-slump, permitting automated glazing
- Non-corrosive by-products

One-part silicone RTV elastomer intended for use as a secondary sealant in a dual-sealed insulating glass unit

### APPLICATIONS

- DOWSIL™ 3-0117 Silicone Insulating Glass Sealant is intended for use as a secondary sealant in a dual-sealed insulating glass unit. A primary seal, typically polyisobutylene mastic, is required to prevent moisture vapor from transmitting into the airspace of the insulating glass unit. DOWSIL 3-0117 Silicone Insulating Glass Sealant can bond the individual components, forming a weather-resistant unit.
- DOWSIL 3-0117 Silicone Insulating Glass Sealant is also recommended with insulated glass units incorporating specialty glass types, or with free edges (solar architecture).

### TYPICAL PROPERTIES

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

Test*	Property	Unit	Result
	<b>As supplied</b>		
CTM 0044	Specific gravity		1.33
ASTM C1183	Extrusion rate, conditions 6.2 bar, orifice 3.2mm	g/minute	120
CTM 0663	Deep section cure, 8 hours	mm	1.40
CTM 0663	Deep section cure, 24 hours	mm	2.64
ASTM D2377	Tack-free time	minutes	25
ASTM D2202	Flow/Sag (Slump)	mm	<5.0
	<b>As cured - 7 days at 25°C (77°F) and 50% RH 2mm thickness S2 dumb bells following ISO 37</b>		
CTM D2240	Durometer hardness, Shore A	points	46
ASTM D412	Tensile strength	MPa	2.3
ASTM D412	Elongation	%	250
ASTM C794	Adhesion in peel, cohesive failure		
	- Aluminum	%	100
	- Glass	%	100
	<b>Tensile adhesion to glass, 12x12x50mm TA joint following ISO 8339</b>		
CTM 1028	Ultimate tensile strength	MPa	1.1
	Modulus 25%	MPa	0.53
	Cohesive failure	%	100

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

ASTM: American Society for Testing and Materials.

## DESCRIPTION

DOWSIL 3-0117 Silicone Insulating Glass Sealant is a single component silicone sealant that cures in the presence of atmospheric moisture to produce a durable, high modulus, flexible silicone seal that is chemically stable and shows little change in physical properties with weathering.

DOWSIL 3-0117 Silicone Insulating Glass Sealant is available in black and grey.

## HOW TO USE

### Design considerations

If requested, Dow may provide assistance in design and performing adhesion testing to coated glass or spacer surfaces before use of DOWSIL 3-0117 Silicone Insulating Glass Sealant in production quantities.

### Surface preparation

Before using this product, clean all surfaces, removing all foreign matter and contaminants, such as grease, oil, dust, water, frost, surface dirt, old sealants or glazing compounds and protective coatings.

### Dispensing

Simple transfer ram pumps can be used to dispense DOWSIL 3-0117 Silicone Insulating Glass Sealant either by direct or robot gunning or cartridge filling. When direct gunning is used, it is recommended that all flexible hoses be of the type that do not transmit water vapor; ideally P.T.F.E. lined hoses should be used.

As the product requires no catalyst but cures by reaction with atmospheric moisture, solvent flushing of equipment is not generally necessary even when equipment has been left standing.

### Tooling

To obtain optimum adhesion, joints should be tooled immediately after sealant application to ensure complete substrate contact.

## 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 between 5°C (40°F) and 30°C (85°F) in the original unopened containers, this product has a usable life of 12 months from the date of production.

## PACKAGING INFORMATION

This product is available in 600ml sausages and 250kg drums.

## LIMITATIONS

DOWSIL 3-0117 Silicone Insulating Glass Sealant should not be applied:

- As a primary or single seal in an insulating glass unit.
- To building materials that bleed oils, plasticizers or solvents – materials such as impregnated wood, oil-based caulks, green or partially vulcanized rubber gaskets and tapes.
- On food contact surfaces – this product does not comply with FDA food additive regulations.
- In below-grade applications.
- Where it will be in contact with or exposed to sealants that liberate acetic acid.

- In totally confined spaces (the sealant requires atmospheric moisture and must release by-product to cure).
- For continuous immersion in water.

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](http://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.