

Product Information

Solar

Dow Corning® Solar PV InstantSeal

FEATURES

- Excellent adhesion to typical PV substrates
- Clear product improves module aesthetics
- Increased green strength
- Low VOC (VOC exempt in CA)
- Safe to handle – nonhazardous composition and byproducts
- UL RTI 105°C (221°F)

COMPOSITION

- One-part, reactive hot-melt, neutral cure silicone sealant

Outstanding adhesion and peel strength silicone sealant

APPLICATIONS

- Bonding and sealing photovoltaic module components
- Used for junction box sealing

TYPICAL PROPERTIES

Specification Writers: Please contact your local Dow Corning sales office or your Global Dow Corning contact before writing specifications on this product.

Method	Test	Unit	Result
CTM ¹ 0719	Viscosity at 248°F (120°C)	poise	2100
CTM 0086	Nonvolatile Content	percent	>98.5
CTM 0243	Open Time	minutes	15
CTM 0243	Green Strength at 15 minutes	psi	15
CTM 0243	Green Strength at 60 minutes	psi	18
	Cure Time	Days	2
ASTM C 661	Durometer, Shore A	points	60
ASTM ² D 412	Tensile Strength	psi	350
ASTM D 412	Elongation	percent	1000
ASTM D 412	Modulus at 50 percent Elongation	psi	75
ASTM C 719	Movement Capability	percent	±25
ASTM C 794	Peel Strength		
	to Float Glass	pli	50
	to Mill-Finished Aluminum	pli	45
	to Fiberglass	pli	45
	to Kynar™-Coated Aluminium	pli	50
	to Tedlar®	pli	54
ASTM C 793	Weathering Resistance		Excellent
CTM 0044	Specific Gravity, uncured		1.061

¹CTMs (Corporate Test Methods) correspond to standard ASTM tests in most instances. Copies of CTMs are available upon request.

²ASTM – American Society for Testing and Materials.

DESCRIPTION

Dow Corning® Solar PV InstantSeal is a clear, one-part, 100 percent silicone, neutral-cure sealant designed to be used with automated equipment for high speed applications.

APPROVALS/ SPECIFICATIONS

- AAMA 802.3-92 (Type I & II)
- AAMA 805.2-94 (Group C)

HOW TO USE Preparation

Surfaces should be clean and dry before sealant application.

Application

Dow Corning Solar PV InstantSeal is applied from 20-L (5-gal) pails or 200-L (55-gal) drums with a platen-type hot-melt pump. Application temperature is typically 120°C (250°F). When the melt temperature has been reached, application with automated or hand-assisted glazing equipment can begin.

Once applied to the PV frame sash or channel, the glass or module laminate should be positioned within 15 minutes. Once applied, this product reacts with atmospheric moisture to form a

weather-resistant, flexible silicone sealant. Exposure of opened containers to air should be minimized.

HANDLING PRECAUTIONS

Material is applied at 120°C (250°F). Use common personal protective equipment to prevent contacting the hot material with skin or eyes.

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL, AND HEALTH HAZARD INFORMATION. THE MATERIAL SAFETY DATA SHEET IS AVAILABLE ON THE DOW CORNING WEBSITE AT WWW.DOWCORNING.COM, OR FROM YOUR DOW CORNING REPRESENTATIVE, OR DISTRIBUTOR, OR BY CALLING YOUR GLOBAL DOW CORNING CONNECTION.

USABLE LIFE AND STORAGE

When stored at or below 32°C (90°F) in the original unopened containers, *Dow Corning* Solar PV InstantSeal has a usable life of 12 months from the date of manufacture. Refer to product packaging for "Use By" date.

PACKAGING

Dow Corning Solar PV InstantSeal is available in 20-L (5-gal) pails contain-

ing 18 kg (40 lb) and 200-L (55-gal) drums containing 205 kg (452 lb).

LIMITATIONS

Dow Corning Solar PV InstantSeal is not intended for use:

- In spaces totally confined from atmospheric moisture during cure
- In continuous water immersion
- In below-grade applications
- In structural glazing applications
- As an insulating glass sealant
- On surfaces that require painting or staining
- On surfaces that might bleed oils, plasticizers, or solvents
- On frost-laden or wet surfaces
- When movement capability greater than 25 percent is required

Avoid prolonged exposure to solvents.

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 Corning* has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, www.dowcorning.com, or consult your local *Dow Corning* 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 *Dow Corning's* 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 Corning's sole warranty is that the product will meet the *Dow Corning* 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.

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

DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.