

Silicon-based photovoltaic solutions

A portfolio of PV materials
from DuPont™ Fortasun™

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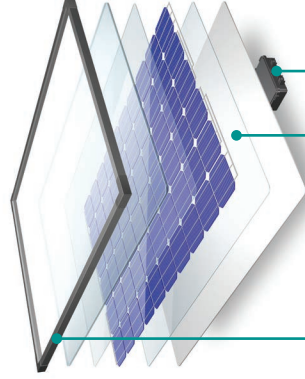
Fortasun™

Solar Silicones

Welcome to the Fortasun™ selection guide

DuPont™ Fortasun™ (formerly Dow Corning Silicones) provides silicone-based solutions for commercial and residential solar panels. Available as sealants, adhesives, potting agents, and encapsulants; Fortasun™ products increase the performance of solar modules around the world by reducing costs and increasing durability of photovoltaic modules and concentrators.

From panel frames to junction boxes, Fortasun™ products remain UV stable for decades, providing a strong adhesive bond that helps reduce failures due to moisture. They are also electrically insulating, providing protection against corrosion and delamination. You'll experience long-term durability, a lower cost of ownership and more power over a longer period of time.



Sealants & adhesives
Encapsulants
Potting agents

All products listed in this selection guide are DuPont™ Fortasun™ brand products.

Fortasun™ product	Description/Advantages	Cure System	Mix Ratio/By Weight	Color	Viscosity, cPs Extrusion Rate g/min	Specific Gravity Mixed Parts	Working Time @ 25 °C	Cure Time/ Temperature	Thermal Conductivity	Shelf Life	UL Ratings
PV-802 Electrically Conductive Adhesive	<ul style="list-style-type: none"> Electrical and mechanical bonding for back-contact module - Still in use for module assembly process - Curing profile matches typical lamination Low CTM (cell-to-module) power loss - Superior stability and durability - Low material consumption 	Addition cure	1-part	Gray	95,000 cPs	3.95 g/cm ³	72 hours	10 minutes @ 150 °C	N/A	12 months	N/A
PV-622 Cell Encapsulant	<ul style="list-style-type: none"> High optical transmission - UV transparent to 250 nm Adhesion to glass, PET-based PV back-sheet and solar cells Inherently UV stable - Excellent humidity resistance Superior electrical insulation - Fast heat cure (100 °C) PID resistant 	Addition cure	11:2-part	Transparent/translucent	Part A 53,200 cPs Part B 51,600 cPs	0.97	1 hour	190 @ 110 °C 22.5 seconds @ 150 °C	0.771 W/(m·K)	12 months	N/A
PV-7010 Potting Agent	<ul style="list-style-type: none"> Proven solution in PV industry - Fast room temperature or heat cure - Thick section cure - No solvents or cure byproducts - Translucent material - Minimal shrinkage 	Addition cure	11:2-part	Translucent blue and green	Part A 425 cPs Part B 400 cPs	0.98	5-10 minutes	90-100 minutes @ 25 °C 10-15 minutes @ 30 °C 2-5 minutes @ 75 °C	0.20 W/(m·K)	12 months	UL 94 V1; HAI/HWI/CTI=0; RTI 105 °C; (F2)-UV/H ₂ O exposure
PV-7030R Potting Agent	<ul style="list-style-type: none"> Fast room temperature or heat cure - Thick section cure No solvents or cure byproducts - Minimal shrinkage 	Addition cure	11:2-part	Black	Part A 2,835 cPs Part B 2,733 cPs	1.2	8-10 minutes	3.25 hours @ 25 °C 18.5 minutes @ 50 °C 4.3 minutes @ 75 °C	0.28 W/(m·K)	12 months	UL 94 V1; HAI/CTI=0; HWI=2; UV/H ₂ O plane tracking 1000 V and greater; RTI 105 °C; (F2)-UV/H ₂ O exposure
PV-7321 Potting Agent	<ul style="list-style-type: none"> Proven solution in PV industry - Good thermal conductivity Excellent dielectric properties 	Condensation cure	10:1, 2-part	White	Mixed: 8,000 cPs	1.25	22 minutes	72 hours @ 25 °C and 50% RH	0.31 W/(m·K)	12 months	UL 94 HB; HAI=0; HWI=3; CTI=0; RTI 105 °C
PV-7326 Potting Agent	<ul style="list-style-type: none"> High thermal conductivity - Flame resistance VO level 	Condensation cure	6:1	White and black	Mixed: 3,000 cPs	1.48	76 minutes	72 hours @ 25 °C and 50% RH	0.54 W/(m·K)	12 months	IEC 60695-11-10; 20; CTI=0; RTI 105 °C
Solar PV InstantSeal	<ul style="list-style-type: none"> Adhesion to typical PV substrates - Safe to handle - non-hazardous composition and byproducts - Clear product improves module aesthetics 	Moisture cure	1-part	Clear	200,000 cPs at application temperature	1.06	15 minutes with a green strength of 15 psi	48 hours @ 25 °C - 2 mm	N/A	12 months	UL 94 HB; RTI 105 °C
PV-8101F Sealant	<ul style="list-style-type: none"> Adhesion to typical PV substrates - Fast tack-free time Flexible rubber - Fast, deep section cure 	Moisture cure	1-part	White and black	210 g/minute	1.41	4 minutes and 50% RH	24 hours @ 25 °C and 50% RH - 2 mm	N/A	12 months	UL 94 HB; HWI=2; HAI=0; CTI=0; RTI 105 °C
PV-8007 Neutral Sealant	<ul style="list-style-type: none"> High-performance silicone adhesive/sealant with fast green strength - High elasticity after cure allows flexibility in harsh conditions - Adhesion to typical PV substrates Protects against mechanical shock and thermal cycling stress 	Moisture cure	1-part	White and black	170 g/minute	1.56	10 minutes and 50% RH	24 hours @ 25 °C and 50% RH - 2 mm	N/A	12 months	UL 94 V1 (6 mm) HB (3 mm); UL RTI 105 °C; UL; HAI=1; HWI=1; CTI=0
PV-8107 Neutral Sealant	<ul style="list-style-type: none"> High-performance silicone adhesive/sealant with fast green strength - High elasticity after cure allows flexibility in harsh conditions - Adhesion to typical PV substrates Protects against mechanical shock and thermal cycling stress 	Moisture cure	1-part	White	175 g/minute	1.4	20 minutes	24 hours @ 25 °C and 50% RH - 2 mm	N/A	12 months	UL 94 HB (1.5 mm); UL 94 V1 (6 mm); RTI=105 °C
PV-8060 Neutral Sealant	<ul style="list-style-type: none"> Adhesion to typical PV substrates - Protects against mechanical shock and thermal cycling stress High-performance with high elasticity after cure 	Moisture cure	1-part	White and bright white	197 g/minute	1.51	10-15 minutes and 50% RH	24 hours @ 25 °C and 50% RH	N/A	12 months	UL 94 HB; HWI=2; HAI=0; CTI=0; RTI 105 °C
PV-804 Neutral Sealant	<ul style="list-style-type: none"> Proven solution in PV industry - Adhesion to typical PV substrates - Protects against mechanical shock and thermal cycling stress at components 	Moisture cure	1-part	White and black	190 g/minute	1.4	30 minutes	24 hours @ 25 °C and 50% RH - 2 mm	N/A	12 months	UL 94 V1 (5 mm) HB (3 mm); HWI=2; HAI=0; CTI=1; RTI 105 °C; (F2)-UV/H ₂ O exposure
PV-8303 Ultra Fast Cure Sealant	<ul style="list-style-type: none"> Adhesion to typical PV substrates - Ultra-fast cure for fully automated processes - Two-part product providing customized cure rate using Fortasun™ PV-8300 Base catalyst 7:1 	Condensation cure	2-part base; catalyst 7:1	Black	190 g/minute	1.31	5-10 minutes	25 hours @ 25 °C	N/A	Catalyst: 12 months Base: 12 months Base+14 months	UL 94 HB; HWI=3; HAI=0; CTI=0; RTI 105 °C
PV-8310F Fast Cure Sealant	<ul style="list-style-type: none"> Adhesion to typical PV substrates - Fast cure allowing increased production rates - Two-part product providing customized cure rate using Fortasun™ PV-8300 Base catalyst 7:1 	Condensation cure	2-part base; catalyst 7:1	Black	190 g/minute	1.31	20-25 minutes	8 hours @ 25 °C	N/A	Catalyst: 14 months Base+14 months	UL 94 HB; HWI=3; HAI=0; CTI=0; RTI 105 °C
PV-8030 Adhesive	<ul style="list-style-type: none"> Adhesion to typical PV substrates - Protects against mechanical shock and thermal cycling stress at components 	Moisture cure	1-part	White and black	110 g/minute	1.34	20-30 minutes	24 hours @ 25 °C and 50% RH - 3 mm	N/A	18 months	UL 94 HB; HWI=2; HAI=2; CTI=0; RTI 105 °C

Please consult the data sheets for complete information on testing methods and conditions.

RH = Relative humidity

*Available in China only

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For over 40 years, our material innovations have led the photovoltaics industry forward and helped our clients transform the power of the sun into power for us all.

Today, we offer a portfolio of solutions that deliver proven power and lasting value over the long term. Whatever your material needs, you can count on quality DuPont Photovoltaic Solutions to deliver the lifetime performance, efficiency and financial returns you require, day after day after day.

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