

# Product Information

## Solar

# Dow Corning® PV-7321 Potting Agent

## FEATURES

- Excellent dielectric properties
- Room temperature cure, no ovens required
- No additional priming step required

## COMPOSITION

- Two-part 10:1 mix silicone elastomer supplied as flowable liquid

Silicone potting material providing environmental protection and thermal management

## APPLICATIONS

- Potting of solar module junction boxes

## TYPICAL PROPERTIES<sup>4</sup>

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning contact before writing specifications on this product.

Test	Unit	Result
Color		white
Viscosity Mixed	centipoise or mPa s	8000
Durometer, Shore A		31
Specific Gravity <sup>1</sup>		1.25
Working Time/Snap Time <sup>2</sup>	minutes	22
Room Temperature Cure Time <sup>3</sup>	hours	72 hours @25°C
Dielectric Strength	volts/mil kV/mm	635 25
Thermal Conductivity	watts/meter °K	0.30
CTE	ppm/degree C	211

<sup>1</sup> Cured

<sup>2</sup> Working Time is the point that the material begins to thicken and starts to become non-flowable at Room Temperature

<sup>3</sup> Cured at 25°C and 50% RH.

<sup>4</sup> Data generated from lab produced material

## DESCRIPTION

*Dow Corning® PV-7321 Potting Agent* is supplied as two-part liquid component kits comprised of base and catalyst to be mixed in a 10:1 ratio by weight. It is suitable for manual mixing or automated mixing and dispensing. When liquid components are thoroughly mixed, the mixture cures to a flexible elastomer.

Both base and catalyst part are moisture sensitive. Please keep opened packaging away from moisture. Catalyst is especially very sensitive to moisture. Purging with dry N<sub>2</sub> is suggested when reopening packaging.

*Dow Corning PV-7321 Potting Agent* can be dispensed manually or by using one of the available types of meter mix equipment. Typically, the components are readily mixed with static or dynamic mixers. Automated meter-mix equipment is normally used with high-volume processes. For low-volume applications, manual weighing and simple hand mixing may be appropriate.

## HOW TO USE

### Mixing Two-Part Potting Agents

*Dow Corning PV-7321 Potting Agent* is supplied in two parts that are mixed in a 10:1 ratio (base and catalyst).

Inaccurate proportioning or inadequate mixing may cause localized or wide-spread problems affecting the pottant properties or cure characteristics. If possible, the potential for air entrapment should be considered during design of the part and selection of a process to mix and dispense the pottant. Subjecting the pottant part to >28 inches Hg vacuum may be necessary to ensure a void-free, protective layer.

It is expected that some settling may occur in the base over time. Therefore, it is recommended that the base be mixed in a pail or drum roller before use and for automated line use, it is recommended that the base be applied from an agitated dispense tank.

It is recommended that the material be mixed, such as with a pail or drum roller upon receipt. The material should then be applied from an agitated dispensing tank.

### **Working Time and Cure**

Working time (or pot life) is the time required for the initial mixed viscosity to double at room temperature (RT).

For two-part, condensation cure products, such as *Dow Corning* PV-7321 Potting Agent, the cure reaction begins when the catalyst and base are mixed. As the cure progresses, viscosity increases until the material cures. *Dow Corning* PV-7321 Potting Agent will cure at room temperature, 50% relative humidity and the result is 72 hours.

### **USEFUL TEMPERATURE RANGES**

For most uses, *Dow Corning* PV-7321 Potting Agent should be operational over a temperature range of -45 to 150°C (-49 to 302°F) for long periods.

### **HANDLING**

#### **PRECAUTIONS**

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 DOWCORNING.COM, OR FROM YOUR DOW CORNING REPRESENTATIVE, OR DISTRIBUTOR, OR BY CALLING YOUR GLOBAL DOW CORNING CONNECTION.

### **USABLE LIFE AND STORAGE**

Storage conditions and shelf life ("Use By" date) are indicated on the product label.

### **PACKAGING**

*Dow Corning* PV-7321 Potting Agent is available in standard can and pail packaging. Detailed container size information may be obtained from your Dow Corning representative.

### **LIMITATIONS**

Use of this product must be based on the results of your product testing, manufacturing processes, and end applications. Full environmental exposure testing is recommended for all applications.

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, [dowcorning.com](http://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 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.

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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.

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