

# 1521 Potting Materials for PV Junction Box

## TECHNICAL DATA SHEET

### PRODUCTION DESCRIPTION

1521 is two-component, room temperature cure silicon system, used for electronic component applications on assembly line.

### TYPICAL APPLICATIONS

Typical applications involve PV junction box.

### UNCURED PROPERTIES

Chemical type.....	Silicone
Color(Mixed) .....	white
Mixed Rate(weight).....	6: 1
Mixed Rate(volume).....	4: 1
Viscosity of part A (mPa·s) .....	7000
Viscosity of part B (mPa·s) .....	25
Specific Gravity of part A (g/cm <sup>3</sup> ) .....	1.47
Specific Gravity of part B (g/cm <sup>3</sup> ).....	0.99
Specific Gravity after mixed(g/cm <sup>3</sup> ).....	1.40
Pot Life( min) .....	8
Gel Time( min) .....	45

**Cured Specifications:** The mix of part A and part B initiates the reaction. There is a secondary cure with atmospheric moisture that promotes full cure over 7 days.

### CURED PROPERTIES

**Measured on cured sheets ~2mm. Cured @ (23±2)°C, (50±5)%RH for 7 days, tested at (23±2)°C.**

Operating Temperature Range(°C).....	-50-150
Tensile strength(MPa) (ISO37, GB/528) .....	1.2
Hardness (ShoreA) (ISO7619, GB/T531).....	40
Elongation at break (%) (ISO37, GB/528).....	110
Thermal Conductive(W/m.°C) (ASTM C177) .....	0.30
Volume Resistivity(Ω.cm)	
(IEC60093, GB/T1692).....	1.0×10 <sup>15</sup>
Breakdown tension (kv/mm)	
(IEC 60243-1, GB/T1695).....	23

### Damp-Heat aging properties(Damp-Heat aging at 85°C, 85%RH for 1000h)

Volume Resistivity(Ω.cm)	
(IEC60093, GB/T1692).....	1.0×10 <sup>15</sup>

### APPLICATION METHOD

1. Part A should be blended thoroughly before mix with Part B in order to make filling material distribute evenly;
2. Mix evenly according to the ratio;
3. Pot the mixed material;
4. Recommended using automatic dispensing equipment to applying the potting compound.

### STORAGE AND SHELF LIFE

Product shall be ideally stored in a cool, dry area in unopened containers at room temperature. Keep away from children. The shelf life is 6 months.

### CAUTION

- a) Allow adequate ventilation when using.
- b) Avoid prolonged skin contact.
- c) In case of eye contact, flush with water and seek medical attention.
- d) This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.
- e) Keep away from children.

**For complete safety and handling information, please refer to the appropriate Material Safety Data Sheets prior to using this product.**

### ORDERING INFORMATION

Stock No.	Unit Size
152110	14kg

#### Note

The data provided herein are typical values for the purpose of technical reference only, should not be considered as the product specification or acceptance standard. All the information is believed by Tonsan Adhesive Inc. ("Tonsan") to be accurate and reliable, but due to the differences in the application conditions, substrate surfaces and/or curing conditions, Tonsan strongly recommends that the user should perform necessary tests before any purchase or practice, to determine the suitability of our product for the intended use. Furthermore, the storage and shipping conditions could also affect the stability, physical and mechanical properties of the product. Tonsan will not assume the responsibility for the results obtained by the user or any third parties, from the methods out of Tonsan's control.