

# 1585 Silicone Sealant For PV Modules

## TECHNICAL DATA SHEET

### PRODUCTION DESCRIPTION

White, UL certificated, super resistance to ultra violet(UV), rain, contamination and hail. For sealing the side frames of solar cell, sealing/adhesive the junction boxes of solar cell and for sealing the solar energy lamps.

### TYPICAL APPLICATIONS

- Sealing the frames of solar cell.
- Sealing/adhesive the junction boxes of solar cell .
- Sealing the solar energy lamps.

### UNCURED PROPERTIES

Base Resin.....	Poly(dimethyl)siloxane
Color.....	White
Viscosity (cps @ 25°C).....	White paste
Cure Speed(Fixture/Full).....	5min./24 hrs. (2mm)
Specific Gravity (g/cm <sup>3</sup> ) .....	1.50
Flashpoint (°C) .....	>93

**Cured Specifications: Cure speed will vary with temperature, relative humidity, depth of material and presence of moisture.**

### CURED PROPERTIES

**Measured on cured sheets ~2mm. Cured @ (23±2)°C, (50±5)% RH for 14 days, tested at 25°C.**

Hardness (Shore A) (ISO7619, GB/T531) .....	55
Elongation at break (%) (ISO37, GB/528).....	280
Tensile Strength (MPa) (ISO37, GB/528).....	2.5
Adhesion Strength(MPa) (ISO4587, GB7124).....	1.8

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

Elongation at break (%) (ISO37, GB/528).....	340
Tensile Strength (MPa) (ISO37, GB/528).....	1.6

### Electrical Properties

Volume resistivity(Ω.cm) (IEC60093, GB/T1692) ....	.....1.0×10 <sup>15</sup>
Breakdown tension (kV/mm) (IEC60243-1,GB/T1695) .....	.....15

### APPLICATION METHOD

- a) For best result, clean and dry all surface to be sealed.
- b) Apply a continuous and even bead of silicone to one surface.
- c) Assemble parts. Remove excess with knife.

### STORAGE AND SHELF LIFE

Product shall be ideally store in a cool, dry area in unopened containers

### 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.**

### 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.