

# December 2013

# **1527 Silicone Sealant For PV Modules**

### **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)	6min./24 hrs. (2mm)
Specific Gravity (g/cm3)	
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 @  $(23\pm2)^{\circ}$ C,  $(50\pm5)^{\circ}$  RH for 14 days, tested at 25°C.

Operating Temperature Range(°C)	<b>-</b> 54 to 210
Hardness (Shore A) (ISO7619, GB/T531)	48
Elongation at break (%) (ISO37, GB/528)	
Tensile Strength (MPa) (ISO37, GB/528)	2.3
Adhesion Strength(MPa) (ISO4587, GB7124)	

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

Elongation at break (%)	(ISO37, GB/528)	320
Tensile Strength (MPa)	(ISO37, GB/528)	1.6

#### **Electrical Properties**

Volume resistivity(Ω.cm) (IEC60093, GB/T1692)			
1.0	$\times 10^{15}$		
Breakdown tension (kv/mm) (IEC 60243-1, GB/I	16-		
-95)	20		

## **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

Store at room temperature in a cool and dry place. Keep away from children.

#### 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 contained herein are for reference only, and are believed to be typical values and should not be regarded as criteria for checking and accepting. All above data are obtained in TONSAN laboratories in standard conditions; TONSAN can guarantee that they are reliable, but TONSAN can not guarantee that the actual performances will not deviate due to different application ambient, different material surfaces and different curing mechanism. Storage conditions, shipping vehicles and etc. can affect product stability, mechanical and physical performances. We cannot assume responsibility for the results obtained by others over whose methods we have no control. We strongly suggest that the users do a test based on the data before formal use of this product.

For technical assistance, please call +86-10-88795588.

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# TECHNICAL DATA SHEET



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# **ORDERING INFORMATION**

Stock No.	Unit Size
152765	310ml
152764	400ml
152763	600ml
152766	20kg
152769	235kg
15276903	270kg