

## Product Data

# High Strength and Elongation, Adhesive Sealant SP100-W

SP100-W is a one-component, fast cure, non-corrosive silicone adhesive sealant that cures on exposure to atmospheric moisture to form an elastic silicone rubber.

SP100-W has a thixotropic paste consistency and excellent corrosion-free adhesion to metals, including copper, plastics, glass without the use of primers.

### Key Features

- ◆ Fast room temperature cure, and neutral alkoxy cure type
- ◆ High strength and high elongation
- ◆ Excellent adhesion after extended aging, and excellent dielectric properties
- ◆ Wide operating temperature range from -50 to +200°C
- ◆ Flame retardant : UL94HB recognized (File No.E56745)

### Applications

- ◆ Sealing and bonding for Solar/PV module components
- ◆ Insulating adhesive sealing and fixing for electrical and electronic parts
- ◆ Waterproof sealant for electrical, electronic and communication equipment

### TYPICAL PROPERTY DATA

(JIS K 6249)

UNCURED PROPERTIES (23°C,50%RH)		SP100-W
Appearance		Non-Flowable, White
Tack free time	min	20
CURED PROPERTIES (7days @ 23°C,50%RH)		
Appearance		Elastic rubber, White
Density	g/cm <sup>3</sup>	1.42
Hardness (Type A)		34
Tensile strength	MPa	2.3
Elongation	%	650
Adhesive strength <sup>*1</sup>	MPa	1.9
Thermal conductivity <sup>*2</sup>	W/(m·K)	0.38
Linear expansion <sup>*3</sup>	1/K	2×10 <sup>-4</sup>
Volume resistivity	MΩ·m	5×10 <sup>6</sup>
Dielectric strength	kV/mm	20
Dielectric constant (60Hz)		4.0
Dissipation factor (60Hz)		0.04

<sup>\*1</sup> Aluminum Lap shear. <sup>\*2, \*3</sup> In-house test method. *Typical property data values should not be used as specifications.*

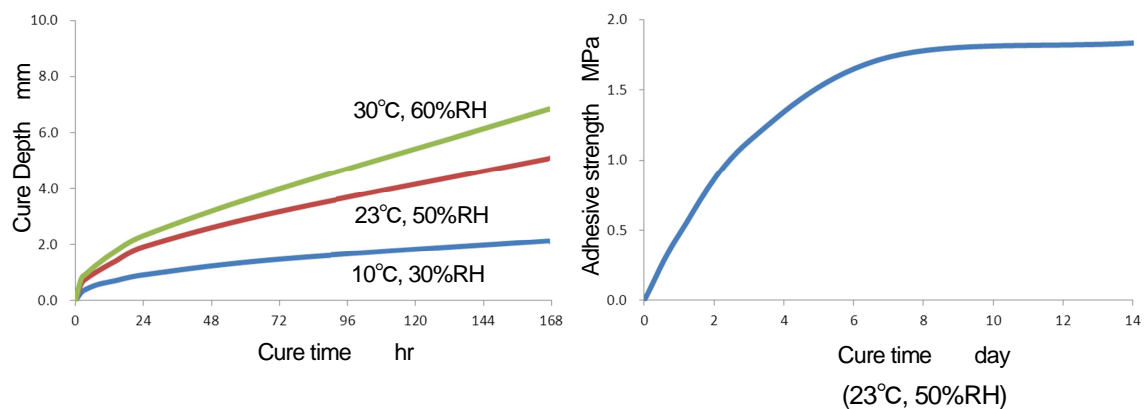
## ADHESION PERFORMANCE

SP100-W has excellent bonding properties and adheres to many materials without primers.

	SP100-W
Aluminum	○
Glass	○
Stainless steel	○
Copper	○
Mild steel	○
Zinc plate	○
Nickel plate	○
Acrylic resin	○
Polyester	○
Epoxy resin	○
Polycarbonate	○
ABS	○
PBT (Polybutylene terephtharate)	○
PPS (Polyphenylene sulfide)	○
PET (Polyethylene terephtharate)	○
PPE (Polyphenylene ether)	○
Modified PPO	○
Phenolic resin	○
Nylon-6	○
Nylon-66	○
PVC (Polyvinyl chloride)	○
PE (Polyethylene)	×
PP (Polypropylene)	×

○: Adhere completely (Cohesive failure),    ×: Does not adhere

## CURE PERFORMANCES



## GENERAL INSTRUCTIONS FOR USE

- ◆ Substrate surface should be thoroughly cleaned with a suitable solvent such as alcohol, xylene, methyl ethyl ketone (MEK) etc.
- ◆ Wear eye protection and protective gloves as required while handling.
- ◆ Adequate ventilation must be maintained in the work place at all times.
- ◆ General adhesive for metals, glass, plastics, etc.
- ◆ Certain plastics may require surface treatments such as plasma or liquid primers to achieve best adhesion levels.

## STORAGE

- ◆ Store in a cool, dry place out of direct sunlight.
- ◆ Keep out of the reach of children.

## PACKAGING

- ◆ 333ml cartridge in case of 10
- ◆ 25kg pail
- ◆ 250kg drum

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