



1581 Silicone Sealant

1581 is a white, one-component, neutral alkoxy-cure silicone adhesive curing at room temperature when exposed to moisture in the air.

This material is recommended for sealing the side frames of solar cell, sealing/adhesive the junction boxes of solar cell and sealing the solar energy lamps.

Technology / Base	Silicone
Type of Product	Adhesive
Components	One component
Curing	Moisture cure
Appearance / Color	White
Consistency	Paste

Features and Benefits

- High performance with fast and excellent adhesion to glass, aluminium alloy etc.
- UL certificated
- Super resistance to ultra violet(UV) and weather
- Excellent performance in insulation, thermal cycling, damp-heat, damp-freezing
- Low-odour

Curing Profile

Recommended cure:
Curing depth is 2mm @ (23±2)°C, (50±5)% RH for 24h

Contact HB Fuller technical support for additional curing recommendations

Application Instructions

1. For best result, clean and dry all surface to be sealed.
2. Apply a continuous and even bead of silicone to one surface.
3. Assemble parts. Remove excess with knife.

Storage Conditions

Product shall be ideally store in a cool, dry area in unopened containers at a temperature between 8°C to 28°C unless otherwise labeled. Optimal storage is at the lower half of this temperature.

Typical Packaging

Please contact your local Sales Office for available packaging options.

Disposal Advice

- a) Allow adequate ventilation when using.
- b) Avoid prolonged skin contact.
- c) In case of eye contact, flush with water and seek medical attention.

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.

Please refer to the MSDS for disposal instructions.

Safety Advice

Please refer to the MSDS for safety advice.



Technical Data

Rheology	Value	Condition/Method
Viscosity (cps @ 25°C)	White paste	
Density		
Density (g/cm ³)	1.43	
Curing		
Flash Point(°C)	>93	ISO3679,GB/T 5208-2008
Cure Speed(Fixture/Full)	3min./24 hrs. (2mm)	Cured @ (23±2)°C, (50±5)% RH
Operating Temperature Range(°C)	-54 to 210	Cured Specifications: Cure speed will vary with temperature, relative humidity, depth of material and presence of moisture.
Cured Mechanical Properties		
Measured on cured sheets ~2mm. Cured @ (23±2)°C, (50±5)% RH for 14 days, tested at (23±2)°C.		
Hardness (Shore A)	45	ISO7619, GB/T531
Elongation at break (%)	260	ISO37, GB/T528
Tensile Strength (MPa)	2.5	ISO37, GB/T528
Adhesion Strength(MPa)	2.0	ISO4587, GB/T7124
Damp-Heat aging properties(Damp-Heat aging at 85°C, 85%RH for 1000h)		
Elongation at break (%)	260	ISO37, GB/T528
Tensile Strength (MPa)	1.8	ISO37, GB/T528
Adhesion Strength(MPa, Al)	1.5	ISO4587, GB/T7124
Electrical Properties		
Volume resistivity(Ω.cm)	1.0×10 ¹⁵	IEC60093, GB/T1692
Breakdown tension (kv/mm)	20	IEC 60243-1, GB/T16-95

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