

One component Silicone RTV Sealing material for PV Module

KE-4528

Features

- One component, fast tack free time
- Non flow type
- Room temperature cure (Oxime cure type)
- Good adhesion to various substrates such as glass, aluminum PVF etc.
- Flexible silicone rubber - from -40 to +180C
- Excellent electrical properties

Applications

Sealing or adhesion for PV application such as Junction box and aluminum frame.

Typical Properties

Item	Unit	Properties
Cure type		Condensation (Oxime)
Color		White, Black., Gray
Viscosity	Pa·s	Paste
Tack-free time	Min.	3
Density 23°C, uncured	g/cm ³	1.41
Hardness	Type-A	59
Elongation at break	%	260
Tensile strength	MPa	2.6
Volume Resistivity	T Ω·m	4
Dielectric Breakdown strength (1mm)	kV	28
Lap shear strength (Aluminum)	MPa	2.0
Lap shear strength (Glass)	MPa	2.0
Lap shear strength (PVF)	MPa	1.8
Flammability	UL94	HB

Not specified values

Packing: 310ml cartridge, 600ml film pack, 25kg pail can, 250kg drum

Curing Condition: 23±2C/50±5%RH for 7days

Handling precautions

KE-4528 reacts with moisture in the air and begins to cure at the surface. Consequently, the cure speed will vary according to the temperature and humidity of the use environment. In addition, please note that if humidity exceeds 100% and water droplets form on the curing rubber, a hydrolytic reaction will precede the cross-linking cure reaction, which will reduce the strength of the post-cured rubber and remain surface tackiness.

The electrical insulative properties will temporarily decline during the curing process. But in nearly all cases, KE-4528 exhibit its inherent electrical insulative properties once completely cured. Please note that in some cases, KE-4528 may not cure if it comes in contact with flux or certain other materials.

Does not use condensation cure products in a completely enclosed space.

Completely remove water, oil, dirt, and contaminants from the surface of the adherend. For certain substrates, use a primer as needed.

When using an air gun, do not exceed 0.3MPa.

Usage

Surface cleaning

Using sandpaper or a solvent (toluene, xylene, etc), thoroughly clean the surface to remove all foreign matter such as rust, oil, dirt, and grime that may impair bonding. Use caution when cleaning plastics with solvents, as some solvents may damage certain plastics.

Application of primer

Apply uniformly using a brush or other tool. Be careful that no spots are missed, as there may be poor adhesion in those areas.

Cartridge type

Cutting the nozzle: After cutting the nozzle, break the seal with a sharp object and insert the cartridge into a caulking gun.

Operation: Grasp the handle/trigger of the loaded caulking gun and squeeze to eject the contents.

Storage: If possible, use all at once. If some material remains, use the removed nozzle end as a plug and seal tightly resealed, the product can be stored for several days.

Storage precaution

Stored between 1~25C, out of direct sunlight.

Safety and hygiene

Be sure to provide adequate ventilation when using KE-4528. During curing methylethylketoxime gas is generated. If you experience any unpleasant symptoms please move to an area with fresh air.

Uncured KE-4528 may irritate skin and mucous membranes, so avoid eye contact and prolonged skin contact. In case of accidental eye contact, flush with water for at least 15 minutes and see a physician. In case of skin contact, immediately wipe off with a dry cloth and wash with soapy water. Contact lens wearers should exercise adequate caution; if uncured KE-4528 enters the eyes, the contact lens may become bonded to the eye.

When using, be careful not to rub the eyes with the hands. Please take appropriate precautions such as wearing safety glasses.

Make sure that work area is well ventilated. Be careful not to inhale vapors from the products used.

Keep out of reach of children.

For more information, please read the Material Safety Data Sheet (MSDS). You can receive an MSDS from our Sales Department.

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