Shin

Flame retardant high thermally conductive Silicone RTV Sealing material

KE-4901-W

Features

One component
Room temperature cure (Alcohol cure type)
Flame retardant (UL-approved File NO.E48923)
High thermally conductivity
Excellent adhesion to plastics, glass, silicone rubber etc.
Fast tack free time
Non corrosive property to general metals
Flexible silicone rubber - from -40 to +180C
Excellent electrical properties

Applications

Adhesion of Power Supply, Electronic parts

Typical Properties

Item	Unit	Properties
Cure type		Condensation (alcohol)
Color		White
Viscosity	Pa·s	Paste
Tack-free time	Min.	2
Density 23℃	g/cm3	1.58
Hardness	Type-A	61
Elongation at break	%	120
Tensile strength	MPa	3.3
Lap shear strength (Aluminum)	MPa	1.3
Volume resistivity	TΩ·m	3.4
Dielectric strength	kV/mm	30
Thermal conductivity	W/m·K	0.8
Flammability	UL94	V-0
Volatile low molecular siloxane content	Σ(D3～D10) ppm	less than 300

Not specified value

Packing: 330ml cartridge **Curing Condition**: 23±2C/50±5%RH 7days

Handling precautions

KE-4901-W 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, but KE-4901-W does not exhibit good deep-curing and is therefore not suitable for wide-area surface bonding. In addition, please note that if humidity exceeds 100% and water droplets form on the curing rubber, a hydrolytic reaction will precede the crosslinking 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-4901-W exhibit its inherent electrical insulative properties once completely cured. Please note that in some cases, the KE-4901-W may not cure if it comes in contact with flux or certain other materials.

Does not use KE-4901-W condensation cure products in a completely enclosed space.

KE-4901-W may yellow over time, but this does not negatively affect the characteristic properties.

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-4901-W. During curing methanol gas is generated. If you experience any unpleasant symptoms please move to an area with fresh air.

Uncured KE-4901-W 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-4901-W 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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D4-2009/4/6