



One Component Epoxy Adhesive

Product Description

JC750-11 is a one-component epoxy adhesive for electronic components bonding. This product is suited for longer pot life industrial applications. Cured product exhibits outstanding adhesion strength, greatly high hardness, excellent greasy resistance, chemical resistance and solvent resistance. This product can fast cure at low temperature and is suited for different kinds substrates bonding. The durability of this product is very high levels that can pass many environmental test experiments. This product is suited for relays assembling and heat sensitive components bonding.

Features

1. This product is solvent-free and non-volatile one-component epoxy.
2. The hardening surface of this product will not exhibit a surface oiliness and poor gloss.
3. This solvent offers excellent retention of electrical insulation properties under high humidity conditions.
4. This product offers excellent chemical resistance and solvent resistance.
5. This product offers excellent storage stability and long shelf life.
6. Cured product exhibits excellent protection and shock resistance for components.
7. This product complies to the 2011/65/EU RoHS regulations.

Typical Uncured Properties

	JC750-11
Appearance	Liquid
Color	Black
Viscosity 25°C, S14 50rpm, cps	15,000~20,000
Viscosity 25°C, S14 5rpm, cps	25,000~35,000
Thixotropic Index	≥ 1.5

Typical Curing Properties

Pot Life, 25°C, day	3
Gel Time, 80°C, min	5
Cure Time, 80°C, min	30

Direction of Use

1. The package of this resin which is refrigerated in -40°C ~ -5°C can be brought to ambient conditions by allowing to stand at 2~13°C for 1 hour and then put the resin at 14~34°C for 1 hour. Do not loosen container cover before temperature equilibration.
2. Bonding surfaces should be clean, dry and properly prepared.
3. Apply adhesive to one or both substrates to be bonded. The parts must be held in contact until the adhesive is cured.
4. Cure time on the real part will depend on factors, such as part geometry, materials to be bonded, bondline thickness and efficiency of the oven. Cure schedule should be confirmed with actual production parts and equipment.

Typical Cured Properties*1

Glass Transition Temp., (MDSC), °C	30
CTE*3 (<Tg), μm/m/°C	41
CTE*3 (>Tg), μm/m/°C	214
Durometer Hardness, Shore D	80
Specific Gravity	1.66
Water Absorption Ratio (25°C /24hr), %	0.67
Water Absorption Ratio (80°C /24hr), %	1.99
Water Absorption Ratio (97°C /1.5hr), %	1.75
Shear Strength Al vs Al, kgf/cm ²	125
Shear Strength	118
Stainless steel vs Stainless steel, kgf/cm ²	
Degradation Temp. (TGA 10°C /min), °C	352
Weight Loss Ratio @100°C, %	0
Weight Loss Ratio @150°C, %	0
Weight Loss Ratio @200°C, %	0
Weight Loss Ratio @250°C, %	0.10
Weight Loss Ratio @300°C, %	0.34
Weight Loss Ratio @350°C, %	4.51
Thermal Conductivity, W/mK	0.3
Thermal Resistance, m ² K/W	0.01
Flow Length Ratio*2, mm	10~30
Volume Resistivity, ohm-cm	5*10 ¹⁵
Surface Resistivity, ohm	5*10 ¹⁴
Dielectric Constant, 100HZ	4.1
Dielectric Strength KV/mm	18
Recommended Temperature Range, °C	-40 ~ 120
High Temperature Range After Cured, °C	100

*1 Specimen Cure Condition: 80°C / 30min

*2 For reference only

*3 CTE: Coefficient of Thermal Expansion

Storage and Shelf Life

This product should be kept without any possibility of moisture and heat exposure. Shelf life of this product is 8 months when stored at -40°C ~ -5°C in the original and unopened containers. Before use, this product should be placed at 14~34°C for 1 to 2 hours. It is recommended to use up this product within 3 days. The properties of this product will be changed when placing at 14~34°C for too long time.

Caution

Some findings indicate a lack of potential for carcinogenicity with the compositions of this product by long term recurrent application to the skin. However, contact with skin is likely to produce mild transient reddening. It is important to remove adhesive from skin with soap and water thoroughly. DO NOT use solvents for cleaning hands. This product of moderate acute toxicity by swallowing. If swallowed, call a physician. Avoid contact with eyes. In case of contact, flush with water for at least 15 minutes and get medical attention immediately. For specific information on this product, consult the Safety Data Sheet.