IXCHEMISTRY 16219

Technical Data Sheet

One-Component Rapid Cured Transparent Structure Adhesive

Product Description

IX16219 is UV-curing adhesive which is designed for PC, ABS, PVC,PET electroplating for metals, such as aluminum, iron and stainless steels bonding and Glass. This product has high transparency, high speed curing and good water resistance. It is well suitable for encapsulating in electronic field.and DIY bonding of jewelry.

Features

1. This resin is suited for various plastics and metals bonding.
2. Bonding and sealing of electronic wiring and harness ports.
3. Trandsparent adhesion of jewelry.
4. This product has flexibility and fracture energy absorption.
5. This resin is also suitable for encapsulation.
6. This product complies to the 2011/65/EU RoHS regulations.

Typical Uncured Properties

	IX16219
Appearance	Liquid
Color	Transparent
Viscosity* 25°C, S14 10rpm, cps	27,000~38,000
Thixotropic Index	2.5
Solvent Content, %	0

*This value is for reference.Please refer to COA for the actual value.

Typical Curing Properties*

Curing Equipment: Mercury-vapor lamp / Halogen lamp	
Recommended Wavelength, nm	310~365
Minimum Light Intensity, mW/cm^2	> 50
Minimum Light Energy, mJ/cm^2	> 1,000
Cured time	10-60 Seconds
Curing Equipment: LED light	
Recommended Wavelength, nm	365~395
Recommended Main band, nm	385
Minimum Light Intensity, mW/cm^2	> 100
Minimum Light Energy, 2~3mm, mJ/ cm^2	2,500~3,000
Cured time	10-60 Seconds

*The minimum light energy is for reference.
*The layer is thinner,the solidifies is faster.

Direction of Use

1. It should be applied to a clean surface which is free of dirt, grease or mold release. In many cases, a simple solvent wipe is sufficient.
2. For maximum bonding strength apply adhesive evenly to both surfaces to be jointed.
3. Cure time on the really part will depend upon fators such as part geometry, materials to be bonded, bondline thickness and efficiency of the UV light. Cure schedule should be confirmed with actual production parts and equipment.
4. Please standardize the UV lamp intensity and illumination. Over exposure will not affect the resin properties, but the resin properties will be changed if there is not enough exposure. The resin may have lower reaction rate and may not pass the envrionmental test experiments.
5. This product may cause skin irritation to sensitive personnel.

Typical Cured Properties

Durometer Hardness ASTM D2240-03, Shore D	70
Durometer Hardness ASTM D2240-03, Shore A	97
Glass Transition Temp.,(TMA)°C	67
CTE*2 (< Tg), μm/m/ °C	89
CTE*2 (> Tg), μm/m/ °C	212
Thrust strength, Capacitor diameter 10mm + FR4, kgf	11
Shear strength, PC + PC, kg/cm^2	34
Shear strength, PET + PET, kg/ cm^2	45
Shear strength, FR4 + FR4, kg/ cm^2	38
Shear strength, PVC + PVC, kg/ cm^2	34
Shear strength, SUS + SUS, kg/ cm^2	12
Shear strength, Al + Al, kg/ cm^2	13
Specific Gravity	1.08
Degradation Temp. (TGA 10°C /min), °C	310
Volume Resistivity, ohm-cm	5.48*10^{12}
Surface Resistivity, Ω	5.48*10^{11}
Dielectric Constant, @100Hz	5.171
Dielectric Constant, @1KHz	5.007
Dielectric Constant, @1MHz	4.612
Dielectric loss, @ 100Hz	0.0413
Dielectric loss, @ 1KHz	0.0204
Dielectric loss, @ 1MHz	0.0393
Dielectric Strength, V/mil	665
Temperature Range, °C	-30 ~ 120
Temperature curve of short-term high temperature through tin,silver,copper and solder	Pass

Storage and Shelf Life

This product should be kept without any possibility of light exposure. Replace the lid immediately after use. Shelf life of this product is one year when stored in dark place below 10~35°C in original, unopened containers.The expiry date is indicated on the label.

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 is 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 Material Safety Data Sheet.