

UV3403

Photo-light & UV Curing Adhesive

UV3403 is a one-component, UV-curable, acrylic adhesive specifically designed for electrical applications. It's used primarily for sealing and coating protection of sub-components. This product features medium viscosity, fast curing speed, and good weather resistance. Typical uses include NTC sealing protection on the FPC wiring harness of power battery modules.

UNCURED PROPERTIES

Properties	Reference
Chemical composition	Polyurethane acrylic resin
Physical state	Liquid
Appearance	Colorless transparent viscous liquid
Viscosity (25°C, spindle viscometer 4#60 mPa.s)	4000-7000
Specific gravity Kg/L	1.08
Solvent content (%)	0
Heavy metal content PPM	0

Properties	Reference
Hardness Shore D	20-25
Elongation break %	260
Water absorption %	1.37
Operating time range	Customers can test by themselves according to the workpiece
Appearance	Transparent
Peel strength	9.6 N/cm

ELECTRICAL PROPERTIES

Properties	Reference
Dielectric constant (100MHz)	3.08
Dielectric loss (1MHz)	0.03
Dielectric strength (KV/mm)	26.7
Surface resistivity (Ω)	1.49x10 ¹⁶
Volume resistivity (Ω.cm)	4.64x10 ¹⁴

WEATHER RESISTANCE TEST

The following data are measured after curing using a 395nm wavelength LED surface light source with a cumulative energy of 5000mj/cm²

Base material	Test conditions	Peel strength rate (%)
PI/GLASS	85°C 85%RH (200H)	92
PI/GLASS	85°C 85%RH (500H)	85
PI/GLASS	-40°C-85°C (200H)	85
PI/GLASS	-40°C-85°C (500H)	78

TYPICAL CURING PROPERTIES

UV3403 curing occurs under sufficient UV irradiation. The speed and depth of curing are influenced by the light intensity, spectral distribution of the light source, irradiation time, and light transmittance of the adhered material. The provided data was measured at a 395nm wavelength under the condition of an LED surface light source producing 220mw/cm² ultraviolet radiation.

Properties	Reference
Tack free time (1mm)	10-15 s
Deep curing time (1mm)	8-12 s
Full cure energy (1mm)	2600 mJ/cm ²

*Recommended Curing Equipment: FUV-100 UV Oven Curing & CUV-350 UV Conveyor Curing

UNCURED PROPERTIES

The following data are measured after curing using a 395nm wavelength LED surface light source with a cumulative energy of 2600mj/cm²

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STORAGE

Please store in a cool and dark place. Please close the bottle cap after opening it. Do not pour the unused glue back into the original bottle. The optimal storage temperature is 8-28°C. Too high or too low will affect the performance of the glue. The shelf life is 8 months.

The data contained in this bulletin is provided only as a guide for evaluation/consideration. These material characteristics are typical properties that are based on a limited number of samples tested in the laboratory. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any product or method. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide.