

## UV5136

### Photo-light & UV Curing Adhesive

UV5136 is a one-component, UV-curable, acrylic adhesive. This product is specially designed for bonding and fixing various electronic components and plastic substrates; the product has the characteristics of fluorescent effect, good flexibility, fast curing speed, high bonding strength, and good weather resistance.

#### UNCURED PROPERTIES

Properties	Reference
Chemical composition	Polyurethane acrylic resin
Physical state	liquid
Appearance	Light yellow transparent viscous liquid (fluorescent)
Viscosity (25°C, spindle viscometer 4#30 mPa·s)	6500-7500
Specific gravity Kg/L	1.08
Solvent content%	0
Heavy metal contentPPM	0

Properties	Test method	Reference
Hardness	Shore D	45-50
Elongation %		180
Operating temperature range	-40~130°C	Customers conduct self-test with workpieces
Shear strength	PC/ABS	≥100N/cm <sup>2</sup>
Peel strength	PC/ABS	≥50N/cm

#### CURING PROPERTIES

UV5136 will cure under sufficient UV irradiation conditions. The curing speed and depth depend on the light intensity, spectral distribution of the light source, irradiation time and the transmittance of the adhered material. The following data are measured under the condition of ultraviolet radiation of 20mw/cm<sup>2</sup> produced by a high-pressure mercury lamp:

Properties	Reference
Tack free time (1mm)	15-20 S
Deep curing time (1mm)	35-40 s
Full cure energy (1mm)	1000 mj/cm <sup>2</sup>

\*Recommended curing system: CUV-350 UV Mercury Lamp

#### CURED PROPERTIES

The following data are measured after curing with a high-pressure mercury lamp source with a cumulative energy of 1000mj/cm<sup>2</sup>:

#### ELECTRICAL PROPERTIES

Properties	Reference
Dielectric constant (100MHz)	3.08
Dielectric loss (1MHz)	0.03
Dielectric strength (KV/mm)	26.7
Surface resistivity (Ω)	1.49×10 <sup>16</sup>
Volume resistivity (Ω.cm)	4.64×10 <sup>14</sup>

#### WEATHER RESISTANCE TEST

The following data are measured after curing with a high-pressure mercury lamp source with a cumulative energy of 1000mj/cm<sup>2</sup>:

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Base material	Test Conditions	Bonding strength retention rate (%)
PC/GLASS	65°C 90% RH (72H)	80
PVC/GLASS	65°C 90% RH (72H)	75
Stainless steel/PVC	65°C 90% RH (72H)	82
Stainless steel/GLASS	65°C 90% RH (72H)	92

### **STORAGE CONDITIONS**

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.