

## UV5133

### Photo-light & UV Curing Adhesive

UV5133 is a one-component, UV-curable, acrylic adhesive. This product is designed for the bonding of PMMA, PC, TPU, PET and other plastics. It is mainly used for projects with glue overflow and surface drying. It has the characteristics of moderate viscosity, strong adhesion, surface drying, high transparency, and good weather resistance. , plastic also has certain adhesion to glass.

#### UNCURED PROPERTIES

Properties	Reference
Chemical composition	Polyurethane acrylic resin
Physical state	liquid
Appearance	Light yellow transparent viscous liquid
Viscosity (25°C, spindle viscometer 4#60 mPa·s)	5500-6500
Specific gravity Kg/L	1.05
Solvent content%	0
Heavy metal content PPM	0

#### CURING PROPERTIES

UV5133 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 light transmittance of the adhered material. The following data are measured under ultraviolet radiation conditions of 20mw/cm<sup>2</sup> generated by a high-pressure mercury lamp (it is recommended to use a UV lamp of 400W or above):

Properties	Reference
Tack free time (1mm)	4-6 S
Deep curing time (1mm)	10-15 s
Full cure energy (1mm)	600 mj/cm <sup>2</sup>

#### CURED PROPERTIES

The following data are measured after curing with a high-pressure mercury lamp source with a cumulative energy of 600 mj/cm<sup>2</sup>:

Properties	Test method	Reference
Hardness	Shore D	70-75
Operating temperature range	--40~130°C	Customers conduct self-test with workpieces
Shear strength	PC/PC	≥100N/cm <sup>2</sup>

#### WEATHER RESISTANCE TEST

The following data are measured after curing with a high-pressure mercury lamp source with a cumulative energy of 600 mj/cm<sup>2</sup>:

Base material	Test Conditions	Bonding strength retention rate (%)
PC/PC, PET/PET	-25°C (1h) + 55 °C (1h)20 cycles	95
PMMA/PMMA, PET/GLASS	-25 °C (1h) + 55 °C (1h)20 cycles	95
PC/GALASS, PET/PET	65°C90%RH (72h)	92
PMMA/GLASS, PET/GLASS	65°C90%RH (72h)	92

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### 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.