

# UV5126

#### UV Curing Bonding & Potting Adhesive

UV5126 is a one-component, UV-curable, acrylic adhesive. This product is specially designed for bonding, fixing and covering protection of electronic components; the product has the characteristics of medium viscosity, fast curing speed, and good weather resistance.

#### **UNCURED PROPERTIES**

Properties	Reference
Chemical composition	Polyurethane acrylic resin
Physical state	liquid
Exterior	red viscous liquid
Viscosity (25°C, spindle viscometer 4#30 mPa•s)	21000-25000
Specific gravity Kg/L	1.08
Solvent content%	0
Heavy metal contentPPM	0

## **CURING CONDITIONS**

UV5126 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 the condition of ultraviolet radiation of 20mw/cm<sup>2</sup> produced by a high-pressure mercury lamp:

Properties	Reference
Tack free time (1mm)	5 - 10S
Deep curing time (1mm)	15 - 205
Full cure energy (1mm)	600 mj/cm <sup>2</sup>

\* Recommended CUV-1800M Inline UV Mercury Curing System

## **CURED PROPERTIES**

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

Properties	Reference
Hardness Shore D	65 - 70
Elongation %	135

Water absorption %	GB/T 1034- 2008	2.9
Operating temperature range	-40∼130°C	Customers conduct self- test with workpieces
Exterior	Visual inspection	red

#### **ELECTRICAL PROPERTIES**

Properties	Test method	Reference
Dielectric constant (100MHz)	GB/T 1409- 2006	3.08
Dielectric loss (1MHz)	GB/T 1409- 2006	0.03
Dielectric strength (KV/mm)	GB/T 1408.1- 2016	26.7
Surface resistivity $(\Omega)$	GB/T 31838.3- 2019	1.49×10 <sup>16</sup>
Volume resistivity (Ω.cm)	GB/T 31838.2- 2019	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  $600 \text{mj/cm}^2$ :

Base material	Test Conditions	Bonding strength retention rate (%)
PC/GLASS	65°C 90% RH (72H)	85
PVC/GLASS	65°C 90% RH (72H)	78
Stainless steel/PVC	65°C 90% RH (72H)	80
Stainless steel/GLASS	65°C 90% RH (72H)	90



# **Technical Data Sheet**

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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.