

Master Bond UV25 One component, moderate viscosity UV curable system

Category : Polymer , Thermoset , Epoxy , Epoxy Encapsulant, Unreinforced

Material Notes:

Product Description: Master Bond UV25 is a multi-purpose, one part UV curing system for bonding, sealing, coating and encapsulation that features excellent optical clarity, good physical properties, moderate viscosity and most importantly, an ultra high glass transition temperature (Tg) of over 180°C. UV25 cures readily in 20-30 seconds when exposed to a UV light source emitting at a wavelength of 320-365 nm with an energy output as low as 20-40 milliwatts per cm². The rate of cure depends upon the compound's distance from the light source, the thickness of the section and of course the intensity of the light source. It should be noted that the system can cure in sections up to 0.100-0.120 inches. However, when bonding, sections of a few thousandths of an inch are more than adequate. Master Bond UV25 is not oxygen inhibited and therefore does not require any special treatment in that regard. It bonds well to glass, surface treated metals and plastics such as polycarbonates and acrylics, among others. UV25 is not only effective for bonding applications; it can also be used as a coating, sealant or encapsulant. While it offers good chemical resistance, its temperature resistance is good. UV25's Tg, as measured by TMA, is 186°C—far higher than any other commercially available UV. The system does not contain any solvents or volatiles and features low shrinkage upon curing. Its service temperature range is -60°F to +500°F. UV25 is an outstanding electrical insulator. Ideal for high production applications where fast fixture times, rapid curing and high temperature resistance are vital, UV25 is widely used in aerospace, fiber-optic, optical, electronic and related industries. Particular attention should be paid to the storage and handling information which is described in the last section of this data sheet. **Product Advantages:**One component system; no mixing needed; ready to use as suppliedExceptionally fast cure upon exposure to a UV light source at ambient temperaturesNo air inhibition while curing; no special inert atmosphere requiredGood electrical insulatorExcellent adhesion to a variety of substratesOutstanding optical clarity; excellent light transmissionInformation provided by MasterBond®

Order this product through the following link:

http://www.lookpolymers.com/polymer_Master-Bond-UV25-One-component-moderate-viscosity-UV-curable-system.php

Physical Properties	Metric	English	Comments
Viscosity	7000 - 11000 cP	7000 - 11000 cP	

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	>= 80	>= 80	
Tensile Strength at Break	>= 51.7 MPa @Temperature 23.9 °C	>= 7500 psi @Temperature 75.0 °F	

Thermal Properties	Metric	English	Comments
CTE, linear	50.0 - 55.0 µm/m-°C	27.8 - 30.6 µin/in-°F	
Maximum Service Temperature, Air	260 °C	500 °F	
Minimum Service Temperature, Air	-51.1 °C	-60.0 °F	
Glass Transition Temp, Tg	186 °C	367 °F	

Optical Properties	Metric	English	Comments
Refractive Index	1.55	1.55	

Electrical Properties	Metric	English	Comments
Volume Resistivity	$\geq 1.00 \times 10^{14}$ ohm-cm	$\geq 1.00 \times 10^{14}$ ohm-cm	
Dielectric Constant	3.6 @Frequency 60.0 Hz, Temperature 25.0 °C	3.6 @Frequency 60.0 Hz, Temperature 77.0 °F	

Processing Properties	Metric	English	Comments
Shelf Life	6.00 Month @Temperature 23.9 °C	6.00 Month @Temperature 75.0 °F	in original unopened containers with no exposure to light

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China