

## Permabond UV7141 UV-curable Adhesive

Category : Polymer , Adhesive , Thermoset , Acrylic/Cyanoacrylate Adhesive

### Material Notes:

Permabond UV7141 is a UV-curable adhesive with a secondary anaerobic cure mechanism. This makes it ideal for bonding materials such as ceramic-coated glass, mirrors, etc. where UV-light cannot penetrate to provide full cure in shadow areas. This dual cure mechanism helps speed up production rates. The UV cure tacks the components in place in seconds, reducing the need for jiggling. The bulk of the adhesive then cures more slowly to produce optimum performance. Features & Benefits: Cures in shadow areas High shear strength Excellent environmental resistance 100% solids, no solvents Excellent adhesion to metal and glass Information provided by Permabond.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Permabond-UV7141-UV-curable-Adhesive.php](http://www.lookpolymers.com/polymer_Permabond-UV7141-UV-curable-Adhesive.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.05 g/cc	1.05 g/cc	Uncured
Viscosity	1000 - 2000 cP @Temperature 25.0 °C	1000 - 2000 cP @Temperature 77.0 °F	Uncured
Storage Temperature	5.00 - 25.0 °C	41.0 - 77.0 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	60 - 70	60 - 70	
Tensile Strength	20.0 MPa	2900 psi	ASTM D2095
Elongation at Break	20 - 50 %	20 - 50 %	
Adhesive Bond Strength	14.0 - 17.0 MPa	2030 - 2470 psi	Glass/steel, Shear

Thermal Properties	Metric	English	Comments
CTE, linear	85.0 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	47.2 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	

Optical Properties	Metric	English	Comments
Refractive Index	1.49	1.49	
UV Transmittance	$\geq 98 \%$	$\geq 98 \%$	

Electrical Properties	Metric	English	Comments
Dielectric Constant	4.0 @Frequency 1.00e+6 Hz, Temperature 25.0 °C	4.0 @Frequency 1.00e+6 Hz, Temperature 77.0 °F	

Electrical Properties	Metric	English	Comments
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Processing Properties	Metric	English	Comments
Cure Time	0.0833 - 0.333 min	0.00139 - 0.00556 hour	fixture time, (low power 4mW lamp)
	30.0 - 60.0 min	0.500 - 1.00 hour	Anaerobic cure speed
	180 - 360 min	3.00 - 6.00 hour	Anaerobic working strength
Shelf Life	12.0 Month	12.0 Month	

Descriptive Properties	Value	Comments
Appearance	Colorless	Uncured
Cure Wavelength (nm)	365	
Maximum Gap Fill (mm)	0.3	
Strength Retention	10% at 200°C	Relative to 0°C
	100% at 0°C	Relative to 0°C
	30% at 150°C	Relative to 0°C
	75% at 100°C	Relative to 0°C
	95% at 50°C	Relative to 0°C

## Contact Songhan Plastic Technology Co.,Ltd.

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