



# **U3320**

U3320 is a low-viscosity UV-curable with excellent bonding characteristics on various plastics, especially PET/ PETG and polycarbonate. U3320's thin viscosity makes it ideal for use in wicking applications, especially on components with close-fitting tolerances.

Technology / Base	Modified Acrylate
Type of Product	Structural Adhesive
Components	One Component
Curing	Ultra Violet Light
Appearance / Color	Light Straw
Consistency	Liquid

Technical Data						
Rheology		Value	Condition/Method			
Viscosity		45 +/- 15 cps	20°C to 25°C (68°F to 77°F)			
Density						
Specific Gravity		1.06				
Curing Process Chara	cteristics					
Flash Point		> 95°C				
Set Time and Wavelength		< 3 sec at 395nm, 50mW/cm2				
Full Cure Time		24 hours				
Shelf Life		9 months				
Storage Condition		8°C to 21°C in darkness				
Optimum Wavelength		300 to 420 nm				
Cured Material Characteristics						
Cured Appearance		Colorless Solid				
Tack Free		Yes				
RoHS Compliant		Yes				
Cured Mechanical Properties						
Hardness	Shore A	63	ASTM D2240			
	Shore D	54	ASTM D2240			
Elongation to Break		150%	ASTM D638			

## **General Instructions**

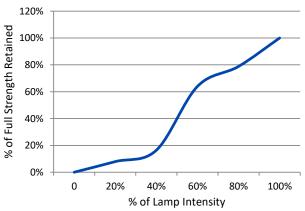
Surfaces to be bonded should be clean and dry. Dispense a drop or drops to one surface only. Apply only enough to leave a thin film layer after compression. Press parts together and expose to UV dose when ready. An adequate bond should develop rapidly, depending on UV dose efficacy, and maximum strength is attained in 24 hours. Wipe off excess adhesive from the top of the container and recap. products, if left uncapped or exposed to sunlight, may deteriorate or cure prematurely.

## **Curing Performance**

Photoinitiation initiates the curing process. Handling strength is reached in a short time, and will vary based on UV dose efficacy, environmental conditions, bond line gap, and other factors. Product will continue to cure for at least 24 hours before full strength and solvent resistance is developed.

## **Specifications and Approvals**

## Percent Strength Retained at Given Dosage



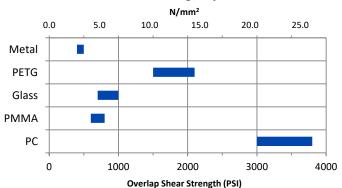




Performance of Cured Adhesive								
Substrate	N/mm²			PSI				
Metal	2.8	to	3.4	400	to	500		
PETG	10.3	to	14.5	1500	to	2100		
Glass	4.8	to	6.9	700	to	1000		
PMMA	4.1	to	5.5	600	to	800		
PC	20.7	to	26.2	3000	to	3800		

<sup>\*</sup> n/r = not recorded on this substrate

## Performance Range, by Substrate



Solvent Resistance		
Solvent	Example	Resistance
Alcohol	Ethanol, Methanol	+++
Ester (aromatic)	Ethylacetate	
Ketone (aromatic)	Acetone, Benzophenone	
Aliphatic hydrocarbon (alkanes)	Petrol, Heptanes, Hexane	+ + -
Aromatic hydrocarbons	Benzyl, Toluol, Xylol	+ + -
Halogenated hydrocarbons	Methylenchloride, Chloroform, Chlorobenzol	
Weak aqueous acid	Nitrite, muriatic acid, sulphuric acid, phosphoric acid	+ + + ( if concentrated)
Weak aqueous base	sodium hydroxide solution, caustic potash	+++(if concentrated)

# Safety and Disposal

For safe handling information and disposal information on this product, consult the Safety Data Sheet (SDS)

> H.B. Fuller Company 9001 W. Fey Drive Frankfort, IL 60423 +1.630.761.8900

### Storage

Products should be stored unopened in a cool, dry place out of direct sunlight. Products should be kept at room temperature away from direct light. Protect from extreme heat or cold, do not refrigerate.

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