



UV 165-183

ONE COMPONENT, FIRE RESISTANT UV CURE

Product Description

UV 165-183 is a fast curing urethane acrylate that bonds well to a wide variety of different substrates. This product requires direct UV exposure during cure. The ability of this product to fluoresce under black light facilitates inspection of bonded assemblies for adhesive presence. Due to the variability of different UV light sources it is suggested that the user test and specify UV intensity and exposure time. This product will cure in the presence of UV/Visible light as defined in the cure recommendations below. UV 165-183 has passed UL94 V0 standards for flame resistance. The adhesive is in full compliance with RoHS Directive 2011/65/EU and RoHS Directive EU 2015/863.

APPLICATIONS	FEATURES	RECOMMENDED SUBSTRATES
	<ul style="list-style-type: none"> • Thixotropic • Moisture resistant • Fast cure time • Good surface wetting • Fluorescing • UL94 V0 certified • RoHS Compliant 	<ul style="list-style-type: none"> • Aluminum • Plastic based substrates • Glass

UNCURED PROPERTIES		
Property	Value	Test Method
Solvent Content	No Nonreactive Solvents	N/A
Chemical Class	Acrylated Urethane	N/A
Appearance	Thixotropic translucent pink liquid	N/A
Specific Gravity (g/mL)	1.29	QPTTEST002
Viscosity @ 25C, SSA @ 10 RPM, cps	30,000 - 90,000	QPTTEST001
Viscosity @ 25C, SSA @ 20 RPM, cps	18,000 - 36,000	QPTTEST001
Viscosity @ 25C, SSA @ 50 RPM, cps	7,000 - 20,000	QPTTEST001
Thixotropic index (SSA)	7.0 - 9.0	QPTTEST001
Highly thixotropic material will decrease in viscosity as shear is increased		
Flow Rate @ 25° C, g/sec.	0.40 - 0.80	QPTTEST022

CURED MECHANICAL PROPERTIES		
Property	Value	Test Method
Durometer Hardness, Shore D	70-85	QPTTEST012
Moisture Resistance	Excellent	N/A
Constant Operating Temperature, °C	-50 to 125	N/A
Adhesion Strength, Al-Al, 25°C Conditioned, lbs.	>22.0	QPTTEST021
Adhesion Strength, Al-Al, 110°C 10 min. exposure, lbs.	>22.0	QPTTEST021

CURE RECOMMENDATIONS - 2 MM THICKNESS					
Uvitron Intelliray 600			Fusion H Bulb		
Exposure Time	25 seconds		Conveyor Speed	2' /MIN	
Distance from Source	2.25"				
Dosage (J/cm ²)	UVA	4.746	Dosage (J/cm ²)	UVA	3.820
	UVB	0.000		UVB	4.104
	UVC	0.280		UVC	0.963
	UVV	5.079		UVV	5.809
Intensity (W/cm ²)	UVA	0.184	Intensity (W/cm ²)	UVA	0.805
	UVB	0.000		UVB	0.893
	UVC	0.011		UVC	0.216
	UVV	0.202		UVV	1.230

Storage:

Store material in dry location at a temperature between -25°C to 28°C. Material is sensitive to UV and visible light. With correct storage, shelf life of material is 12 months. Consult SDS for safe handling recommendations.

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