

CIP-UV100-HV

Technical Data Sheet

CIP-UV100-HV is a high-viscosity, fast-curing urethane acrylate. CIP-UV100-HV cures in seconds to form a soft, flexible, low-modulus polymer that can provide a high amount of bond strength without imparting stress. Once cured, CIP-UV100-HV exhibits excellent moisture resistance. CIP-UV100-HV requires direct UV exposure to cure.

APPLICATIONS	FEATURES	SUBSTRATES
 Gaskets 	Non-yellowing	 Various
	 Low glass transition 	
	 Retains tack 	
	Moisture resistance	

Typical Properties of Uncured Material*

Chemical Class	Acrylated urethane
Color	Clear
Viscosity @25°C, Spn 7 @5RPM, cps	90000 to 150000
Viscosity @25°C, Spn 7 @50RPM, cps	20000 to 40000
Specific Gravity	0.92
Cleanup Solvent	Isopropyl alcohol

UV Light Cure Guidelines*

Recommended Curing Spectrum	UVA
Minimum dosage required, J/cm ²	3

Typical Properties of Cured Material*

Durometer, Shore 00	10
Elongation, %	500
Tensile Strength, MPa, [psi]	0.06, [8]
Water Absorption @ 25°C for 24 hr, %	0
Compression Set @ 25°C for 22 hr, %	0
Temperature at 1 wt. % loss, °C	190
Processing Temperature Range, °C	-50 to 125

^{*}All properties given are typical values and are not intended for use in preparing specifications.

Heat is also an important component with UV cure, and different systems produce different heat outputs. Cure testing was done in an open system and results will vary with application. Consequently, Resin Designs recommends that curing is discussed with our Technical staff to ensure the exact customer process being used will meet the coating cure requirements. After UV exposure and return to room temperature the coating retains tack.

CIP-UV100-HV was designed to be cured using a microwave UV oven. Arc and LED systems may cure CIP-UV100-HV; however, care must be taken during the equipment selection process to ensure minimum dosage and irradiance values obtained will properly cure the coating. Because of the variations possible in curing equipment type and configuration, it is strongly recommended that you contact Resin Designs Technical Support to discuss your equipment and process in detail.

Keep stored between 8°C and 28°C in tightly closed, light-blocking containers away from direct sunlight. Keep from freezing. Please refer to product labeling for shelf-life information. Consult SDS for safe handling recommendations.



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Resin Designs 11 State Street, Woburn, MA 01801

www.resindesigns.com

781-935-3133