

# **URETHANE U100N-HV**

### **NON-SAG URETHANE ADHESIVE**

## TECHNICAL DATA

#### **Product Description**

Resin Design's Urethane U100N-HV is a room temperature curing two part polyurethane system designed to be used for high performance bonding applications. This one to one mix ratio product cures at room temperature in 12-24 hours to a tough and flexible polymer.

#### **APPLICATIONS**

#### **FEATURES**

#### **RECOMMENDED SUBSTRATES**

- Two component system
- Room temperature cure
- Moisture resistant
- Flexible
- · High viscosity
- Glass
- Wood Metals
- Polycarbonates

UNCURED PROPERTIES			
Property	Value	Test Method	
Solvent Content	No Nonreactive Solvents	N/A	
Composition, PT A:B	Isocyanate : Polyol	N/A	
Mixed Color	Clear	N/A	
Viscosity @ 25C, cps, spn 7 @20RPM, PT A	50,000 to 200,000	QPTEST001	
Viscosity @ 25C, cps, spn 7 @20RPM, PT B	25,000 to 50,000	QPTEST001	
Specific Gravity @ 25C, PT A:B	1.15	QPTEST002	
Specific Gravity @ 25C, PT A:B	1.09	QPTEST002	
Mix Ratio by Volume, PT A:B	1:1	N/A	

CURED MECHANICAL PROPERTIES			
Property	Value	Test Method	
Hardness, Shore A	85	QPTEST012	
Tensile Lap Shear, Polycarbonate, psi	540	N/A	
Elongation @ 25C, %	>220	N/A	
Moisture Resistance	Excellent	N/A	
Operating Temperature, C	-20 to 120	N/A	
Dielectric Strength, Volts/mil	420	N/A	
Dielectric Constant, 1 MHz	3.2	N/A	
Dissipation Factor, 1MHz	0.02	N/A	
Thermal Conductivity, W/mK	0.25	N/A	
CTE, ppm/C	120	N/A	
Water Absorption @1 hour boil, %	<2	N/A	
Linear Shrinkage	1.1	N/A	
Tensile Strength, psi, N/(mm^2)	>1500	QPTEST005	

CURE OVERVIEW				
Property	Value	Test Method		
Gel Time @ 25C, min	6-8	QPTEST020		
Cure Time @ Room Temperature, hr	24	N/A		
Cure Time @ 65C, min	15 to 30	N/A		

#### Storage:

Store material in cool, dry location at a temperature between 10°C to 25°C. Keep from freezing. Material is sensitive to moisture. Refer to packaging specific quote for shelf life information. Consult SDS for safe handling recommendations.

Revision Number: 10 Date: 09 November, 2017

Resin Designs 11 State Street Woburn, MA 01801 www.resindesigns.com P 781-935-3133 F 781-935-3144

RESIN DESIGNS, LLC MAKES NO EXPRESS OR IMPLIED REPRESENTATIONS OR WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, WITH RESPECT TO THIS PRODUCT AND GUARANTEES NO PARTICULAR OUTCOME OR RESULT FROM ITS USE. RESIN DESIGNS' LIABILITY TO CUSTOMER WITH RESPECT TO THIS PRODUCT SHALL IN NO EVENT EXCEED THE AMOUNT PAID BY CUSTOMER FOR IT.