



## 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

- Two component system
- Room temperature cure
- Moisture resistant
- Flexible
- High viscosity

##### RECOMMENDED SUBSTRATES

- 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	QPTTEST001
Viscosity @ 25C, cps, spn 7 @20RPM, PT B	25,000 to 50,000	QPTTEST001
Specific Gravity @ 25C, PT A:B	1.15	QPTTEST002
Specific Gravity @ 25C, PT A:B	1.09	QPTTEST002
Mix Ratio by Volume, PT A:B	1:1	N/A

#### CURED MECHANICAL PROPERTIES

Property	Value	Test Method
Hardness, Shore A	85	QPTTEST012
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 <sup>2</sup> )	>1500	QPTTEST005

#### CURE OVERVIEW

Property	Value	Test Method
Gel Time @ 25C, min	6-8	QPTTEST020
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

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