

TECHNICAL DATA SHEET UR7006HV Clear

11/8/2019

N109 W13300 ELLSWORTH DRIVE GERMANTOWN, WI 53022 262-253-5900 FAX 262-253-5919

DESCRIPTION:

ResinLab® UR7006HV Clear is an industrial grade urethane adhesive. This is a 45,000 cps to 50,000 cps mixed viscosity version of UR7006. This formulation is designed to cure under ambient conditions to form a clear, flexible material with very good adhesion to polycarbonate.

TYPICAL PROPERTIES:

All properties given are at 25 °C unless otherwise noted.

Property:	Value:	Test Method or Source:
Color	Clear / Translucent	Visual
Mix Ratio	Part A to Part B	Calculated
By weight	0.98 to 1	
By volume	1 to 1	
Cure Schedule	12 hours 25 °C	
	30 minutes 65 °C	
	15 minutes 100 °C	
Viscosity – Part A	50,000 cps @1/s	Rheometer parallel plate 25mm@1/s
Viscosity – Part B	47,000 cps @1/s	455300006291
Viscosity - Mixed	44,000 cps @1/s	
Specific Gravity – Part A	1.05	Calculated
Specific Gravity – Part B	1.08	
Specific Gravity - Mixed	1.06	
Pot Life, defined as the time it takes for	3 minutes	Rheometer parallel plate 25mm@1/s
initial mixed viscosity to double		455300006291
Hardness	92 Shore A	455300006287/ASTM D2240
Glass Transition Temperature/Tg	-8 °C	453560822409 by DSC
Tensile Properties:		4535601224470/ASTM D638
Strength	1,400 psi	
Elongation	175%	
Modulus	1,300 psi	
Lap Shear Strength		
0.010" bond line Al to Al	1,200 psi	4535601224468/ASTM D1002
0.010" bond line PC to PC	1,200 psi	4535601224468/ASTM D3163
Coefficient of Thermal Expansion by TMA	109 ppm/ °C below Tg	455300005340/ASTM E831
	240 ppm/ °C above Tg	TMA, 5 °C/min

INSTRUCTIONS:

- 1. Bring both components to room temperature prior to mixing.
- 2. Cartridge format: Mixer should be attached keeping the cartridge vertical and any air pocket purged this way. After the mixer contains material, the mixer tip can be dropped to dispense pre-bleed amount. Attach a new static mixer with each



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cartridge, then pre-bleed the first 3 inches of dispensed material or until a uniform color is obtained. Maintain adequate velocity during dispensing to ensure complete mixing.

- 3. Bulk format: weigh and mix parts A and B accurately and thoroughly, scraping sides of container often. Do not pour from mixing container, transfer to a new container as residual unmixed material may cause a tacky spot on the surface of the casting. Maintain adequate velocity during dispensing to ensure complete mixing.
- 4. Allow to cure undisturbed until product is fully gelled or tack-free to the touch.
- 5. Clean up uncured resin with suitable organic solvent such as MEK, acetone or other organic solvent.

SHELF LIFE AND STORAGE:

6 months at 25 °C Bulk.

12 months at 25 °C in cartridges that are foil bagged and desiccant packed.

Isocyanates are sensitive to moisture and should be kept in their original container or in a volume tank under dry nitrogen blanketing. Many isocyanates are prone to dimerization, the formation of a white precipitate. Products with minor amounts of this precipitate normally cure to full properties. Storage at 20 +/- 5 °C (60 °F to 86 °F) is recommended to ensure full shelf life.