



TECHNICAL DATA SHEET

Version 1

Swift®bond 3U316 1N

Liquid Polyurethane

Suggested Application

3U316 1N is a single-component, fully reactive liquid polyurethane adhesive that cross-links through the chemical reaction with moisture, found in the surrounding air and substrates or provided by misting, to produce a thermoset bond.

This product was designed for extrusion based panel assembly including but not limited to recreational vehicles.

Typical substrates

EPS, PU foam, aluminum, wood, steel, and various steel coatings including epoxy/phenolic.

Typical adhesive spread

rates

 $10 - 14 \text{ g/f}^2$

Typical water misting rate

See Chart

All swift®bond liquid moisture cure polyurethanes should be pressed for optimal bond performance.

Pod or Platen presses = 3ps minimum Bag presses = 6 in Hg minimum

Features & Benefits

Patented Fully Reactive Technology	In addition to the many other benefits of this technology, bonded assemblies including darkly colored materials possess exceptional heat resistance
Excellent Creep Resistance	Cured adhesive film is extremely tough yet flexible. This allows for differences in thermal expansion and contraction of various substrates without sacrificing bond performance.
Excellent Environmental Resistance	Cures to form a very strong bond that is resistant to heat, cold, moisture and many solvents
Versatility	Adheres to a wide variety of core stocks and skins

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Typical Properties

Viscosity @ 25°C	4,500 ± 1,500 cps		
Solids	100%		
Wt / Gal	9.25 lbs		
Color	Amber		
Storage Life	6 months unopened		
Safety Advice	Please refer to the MSDS for safety advice		

^{*}dependent upon moisture and temperature

	Water Misting Rate vs. Ambient Plant Conditions								Processing Parameters	
Ambient Conditions	<20%RH	30% RH	40% RH	50% RH	60% RH	70% RH	>80% RH	Maximum Working Time (minutes)	Minimum Press Time (minutes)	
60°F	2.0	2.0	2.0	1.5	1.5	1.5	1.0	11	23	
65°F	2.0	2.0	1.5	1.5	1.0	1.0	1.0	10	21	
70°F	2.0	1.5	1.5	1.5	1.0	1.0	1.0	9	18	
75°F	1.5	1.5	1.5	1.5	1.0	1.0	1.0	8	15	
80°F	1.5	1.5	1.0	1.0	1.0	1.0	0.5	8	13	
85°F	1.5	1.0	1.0	0.5	0.5	0.5	0.5	7	11	
90°F	1.0	0.5	0.5	0.5	0.5	0.0	0.0	7	10	
95°F	0.5	0.5	0.5	0.5	0.5	0.0	0.0	6	10	

^{*}Values are grams of water (mist) required per square foot based on lauan/FRP lamination pressed at 6" Hg vacuum with spread rate of 12 g/ft2

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^{*}Values may vary based on adhesive spread rate, application method, water misting rate and possibly other process related factors





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Storage

To ensure maximum stability, product should be stored in the original closed container in an interior location capable of maintaining a constant temperature.

Important Safety Information

Before using this or any other chemical product, be sure to read and understand the information on the Material Safety Data Sheet and Product Labels. Remain aware of potential hazards and follow all precautionary measures, handling instructions, and disposal considerations outlined in the MSDS

For help in a Chemical Emergency, call CHEMTREC at 1800-424-9300.

Use Precaution

Product is ready to use as received; do not dilute.

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