



TECHNICAL DATA SHEET

Reactive Hot Melt UA1003

March 2021

PRODUCT DESCRIPTION:

Tacusil UA1003 is a fast setting reactive hot-melt adhesive. It's PU base single component material with secondary moisture cure system, which has good adhesion to versatile substrates, such as PC, ABS, glass and most of metal.

After warming applied, contacting with moisture in air is necessary for its full cure. UA1003 is Halogen free and full complaint with RoHS directive 2011/65/EU and Reach directive 1907/2006(SVHC: 211 Items)

BENEFITS:

- ❖ Auto dispensing, special for Jetting valve dispensing
- ❖ Fast setting with high green strength
- ❖ High strength and elongation for plastic bonding
- ❖ Impacting Resistance

TYPICAL PROPERTIES:

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

<i>Property:</i>	<i>Value:</i>	<i>Test Method or Source:</i>
Color	Off-white / Lightly Yellowish	Visual
Component	Single	
Open time /mins	3	
Tack free time under RH 50%/mins	6	
Full Cure Schedule	72hour under RH 50%	
Viscosity / cps 100°C 110°C	4200+/-1000 2800+/-500	Rheometer parallel plate 25mm@1/s
Special Gravity	1.12	
Glass Transition Temperature/Tg	0 °C	DSC
Hardness	42 Shore D	ASTM D2240
Tensile Properties: Strength Elongation	1200psi 1000%	ASTM D638/MTS
Lap Shear Strength 0.010" bond line PC to PC	1350psi	ASTM D1002/MTS



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Non volatile content	100%	Calculated
Application temperature*	100~115°C	

* Asterisk denotes values considered typical to associated resin systems or extrapolated from other test results.

** This TDS contains values that have been updated. The values reported in this technical data sheet are typical values of the product, and are highly dependent on test conditions and methodology.

INSTRUCTIONS:

1. Remove surface contaminants such as paint, oxide films, oils, dust, mold release agents and all other surface contaminants.
2. Use heat insulating gloves to minimize skin contact. DO NOT use solvents for cleaning hands.
3. Use auto dispensing machine to heat UA1003 to 105+/-5°C and dispense an adequate amount of adhesive to one of the bond surfaces.
4. Join the substrates within the specified open time.
5. Keep parts from moving until adhesive is adequately set. For high strength, allow to cure at 25°C for 24 hours.
6. Clean up uncured resin with suitable organic solvent such as MEK, acetone or other organic solvent.

SHELF LIFE AND STORAGE:

Store product in the unopened foil bag in a dry location.

6 months at 5~10 °C in syringe that are foil bagged and dessicant packed

4 months at 25 °C in syringe that are foil bagged and dessicant packed

Note:

This adhesive is sensitive to moisture and should be kept in their original package. Dry nitrogen blanketing in storage cabinet is helpful to ensure its quality in shelf life.