

American Chemical, Inc.

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TECHNICAL DATA SHEET

PRODUCT #UR-2139

Description:

This product is an extremely good plastic and all purpose adhesive. It has achieved good bonds to polycarbonate, polyvinyl chloride, polysulfone, styrene butadiene, rubber blended with natural rubber, acrylics, many metals, woods, and most painted surfaces.

Suggested Uses:

Batteries, shoes, flooring, automotive, appliances, sporting goods, and as an all purpose flexible adhesive.

Product Specifications:

	PART A	PART B	BLEND
Resin system.....	Polyol.....	Isocyanate.....	Urethane
Color.....	Translucent.....	Amber.....	Translucent
Viscosity(cp (mpa.s)).....	700,000.....	900.....	22,000
Weight per U.S. gallon (pounds).....	8.....	10.1.....	8.75
Solids (%).....	100.....	100.....	100
Blending ratio/by volume (A/B).....			100/50
Blending ratio/by weight (A/B).....			100/62.5
Shelf life.....	1 Year.....	6 months.....	
VOC as is - theoretical method (gram/liter).....	0.....	0.....	0
VOC less water & exempt-theo. meth. (gram/liter).....	0.....	0.....	0
Coefficient - linear therm expan (deg F).....			0.000074
Gel Time Sample Weight in Grams (Grams).....			162.5
Gel Time Sample Volume in fluid oz. (Fl. Ounces).....			6
Gel Time Temperature (F.) (Degrees F.).....			77
Gel Time in Minutes (Minutes).....			50
Hardness – Shore A (Shore A).....			90
T-peel (lbs/in wid).....			34.3
Tensile lap shear str. Alum @ 77°F (psi).....			1,400
Tensile lab shear str. Alum @ 180°F (psi).....			190
Tensile lab shear str. Alum @ -40°F (psi).....			5,553

Application & Equipment Suggestions:

Suitable two part metering and mixing equipment is available. Contact your representative for suggested application equipment to suit your specific needs.

Surface Preparation:

surfaces must be clean, dry and free from grease, oil, wax, weak oxide films and other surface contaminants.

Proportioning & Mixing:

hand mixing may be difficult. We suggest using meter-mix equipment equipped with an automatic purge.

Handling Strength:

12 – 16 hours at 77 F

*Cure Schedule:

3 – 7 days at 77 F
3 – 5 hours at 158 F

*Allow additional time for parts to warm to curing temperature.

Performance Characteristics:

Tensile strength and Elongation per ASTM D-638 pulled at 1"/min.

	<u>Tensile Strength</u>	<u>Elongation</u>
73 F	2,100 psi	380%
140 F	295 psi	115%
180 F	180 psi	65%

Lap Shear Tensile Strength per ASTM D-1002, pulled at 0.05"/min. Acid etched 2024-T3 Aluminum to itself.

73 F	1,400 psi
140 F	450 psi
180 F	190 psi

Storage & Handling:

Use good personal hygiene. Avoid eye and skin contact. Wash contaminated clothing before reuse. Store material in closed container in a cool, dry place.

Important:

We recommend that containers be purged with nitrogen after they are opened to the air and not all the material is used.

Caution:

Respiratory irritant. Vapors harmful. Sensitizers. Eye and skin irritant. Harmful if swallowed. Consult the container label and Material Safety Data Sheets for additional cautionary information before using.

The buyer should conduct its own tests of this product before use to determine proper preparation technique and suitability for proposed application. American Chemical, Inc. warrants that the product conforms with American Chemical, Inc. written specifications, and is free from defects. American Chemical, Inc. disclaims all other warranties, expressed or implied, including the warranties of merchantability and fitness for a particular purpose. The buyer's sole remedy for non compliance with this warranty shall be for the replacement of the product or refund of the buyer's purchase price.

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