



## EPOXY GLUE TECHNICAL SHEET

Specific Gravity 25° C/ 25° C (77° F/ 77° F) Sag Resistance @ 25° C	<u>Resin</u> 1.19 pass 1 ½”	<u>Hardener</u> 1.00 pass 1 ½”
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### Typical Mixed Properties of Adhesive System

Mixing Ratio, Resin/Hardener	1:1 by volume 100:85 by weight
Mixed Sag Resistance at 25° C	pass 1 ½”
Pot Life, 4 fl. oz. at 25° C	30-45 minutes

### Typical Cured Properties of Adhesive System

<u>Curing Temperature</u>		<u>Time</u>	<u>Lap Shear Strength (1)</u>	
°C	°F		kg/mm2	psi
25	77	24 hrs	2.1	2990
25	77	48 hrs	2.2	3130
25	77	7 days	2.0	2840
65	150	4 hrs	3.0	4270

### Properties of Material Cured 7 Days @ 25° C

Deflection Temperature (2) @ 264 psi	45.5° C ( 114° F)	
Compressive Properties (3) @ 25° C		
Strength – Ultimate	10.8 kg/mm2	15,300 psi
Strength – Yield	4.0 kg/mm2	5,760 psi
% Strain – Ultimate	49	
% Strain – Yield	2	
Modulus of Elasticity	204 kg/mm2	0.29 x 10(6) psi
Tensile Properties (4) @ 25° C		
Stress – Ultimate	3.6 kg/mm2	5,100 psi
Modulus of Elasticity	190 kg/mm2	.027 x 10(6) psi
% Elongation at failure	6.5	
Flexural properties @ 25° C		
Strength – Ultimate	5.4 kg/mm2	7,680 psi
Modulus of Elasticity	190 kg/mm2	0.27 x 10(6) psi
Water Absorption (6) % of Weight Gain		
24 hrs immersion @ 25° C	.30	
7 days immersion @ 25° C	.83	
2 hrs boiling immersion	1.6	

- (1) Alclad 2024-T-3 aluminum degreased and acid etched per ASTM-D-2651 and tested according to ASTM-D-1002.
- (2) Tested according to ASTM-D-648;
- (3) Tested according to ASTM-D-695.
- (4) Tested according to ASTM-D-638.
- (5) Tested according to ASTM-D-790.
- (6) Tested according to ASTM-D-570.

### **KARDOL EPOXY GLUE DO'S and DON'T'S**

#### **DO'S**

1. Use epoxy glue when surface to be repaired is at least 65°. Please remember that it is possible for air temperature to be 80° and the surface to be repaired can maintain a temperature of 60°. We suggest warming surface with a heat lamp or placing it in direct sunlight to assure a minimum 65° temperature.
2. After repair has been made, and a minimum of 24 hours has passed, you still have a tacky surface, you may remove the tackiness with Kardol acetone.
3. Cure time may be lessened by using an electric hair dryer.
4. Kardol Epoxy Glue Part 1 and Part 2 should be mixed together for approximately 3 minutes to assure thorough mixing.
5. Kardol Epoxy Glue may be applied with a brush, notched trowel, plastic spreader etc.
6. Kardol Epoxy Glue should have a glue line of 10-20 mils thickness; approximately as thick as a standard business card (1/64).
7. Kardol Epoxy Glue may be mixed with washed sand, colored or plain, to form a grout or mortar. Mix 50% -75% by volume. Clean up with Kardol Toluene or Kardol Multi-Purpose Lacquer Thinner.
8. Always use rubber surgical gloves when working with Kardol Epoxy Glue.

#### **DON'T'S**

1. Use Epoxy Glue when outside temperature is below 60°F.
2. Apply to polypropylene, polyethylene or rubber. Kardol Epoxy Glue may be used on PVC pipe after the surface has been sanded with a minimum 40 grit sandpaper and cleaned with Kardol acetone.
3. When clamping, do not squeeze out glue – use toothpicks to prevent extensive pressure from displacing glue.
4. Never leave caps or lids off containers. Epoxies attract moisture which will cause glue to have a slow cure and a tacky surface.

Kardol, LLC  
285 S. West Street  
Lebanon, OH 45036  
800-247-0031

Kardol, LLC  
4400 34<sup>th</sup> Street N.  
St. Petersburg, FL 33714  
800-252-7365

