

TECHNICAL DATA SHEET EP1026HP

12/04/2018

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

DESCRIPTION:

Resinlab® EP1026HP is a high performance fast setting epoxy adhesive designed for bonding metals, ceramics, glass and most plastics. This product will have good resistance to water, salt spray, inorganic acids and bases and most organic solvents.

TYPICAL PROPERTIES:

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

Property:	Value:	Test Method or Source:
Color	Off White	Visual
Mix Ratio	Part A to Part B	Calculated
By weight	1 to 1	
By volume	1.04 to 1	
Cure Schedule	1 hour @ 100 °C	
Viscosity – Part A	8,000 cps RVT, #5 @5 rpm	Brookfield Viscosity 455300005420
Viscosity – Part B	15,000 cps RVT, #6 @20 rpm	
Viscosity - Mixed	12,500 cps (estimated)	
Specific Gravity – Part A	1.13	Calculated
Specific Gravity – Part B	1.18	
Specific Gravity - Mixed	1.15	
Pot Life	3-5 minutes/20g mass	453560822627, observed cup and stick
Glass Transition Temperature/Tg	30 °C	453560822409 by DSC
Hardness	80 Shore D	455300006287/ASTM D2240
Water Absorption	1.47% after 24 hours	457561824543/ASTM D570
Tensile Properties:		455300006285/ASTM D638
Strength	3,500 psi (black says 2500)	
Elongation	20-30% (same as BK)	
Modulus	200,000 psi (same as BK)	
Lap Shear Strength		455300005642/ASTM D1002
0.010" bond line Al to Al	3,500 psi	
Compressive Properties:		455300006265/ASTM D695
Yield Strength	4,300 psi (add yield to black version?)	
Compressive Strength	27,500 psi (black says >28000)	
Modulus	200,000 psi (same as BK)	
T-Peel Strength	15 pli* (this is from orig TDS)	Estimated
Thermal Conductivity by LFA	< 0.2 W / (m.K)*	453560822409/ASTM E1461
Volume Resistivity	8 x 10 ¹⁴ ohm-cm*	455300006612/ASTM D257
Coefficient of Thermal Expansion by TMA	55 ppm/ °C below Tg*	455300005340/ASTM E831
		TMA, 5 °C/min
Dielectric Constant (25 °C, 100Hz)	4.5*	455300006513/ASTM D150
Dielectric Strength	440 V/mil*	ASTM D149 Method A, immersed in ASTM D3487 Type II Oil
Temperature Range	-40 to 130 °C**	
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*Asterisk denotes values considered typical to associated resin systems or extrapolated from other test results.

** Temperature Rating is based on average design requirements and is not intended as a guarantee or suitability for all applications operating at that temperature. *** 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. We actively seek the most precise and accurate ways to measure and interpret performance of our products, and to update estimated values with measured values. The formula has not been revised or changed in any way. Although the values on paper have changed, you can expect the same performance of the product.

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 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:

12 months at 25 °C Specialty packaging may be less. Store cartridges vertically to allow air to accumulate at the tip.

Many epoxy resin systems are prone to crystallization as epoxy resin is a super-cooled fluid. This condition may give the product a gritty or grainy appearance (or hazy in clear products). Products in this state will not usually cure to normal and expected properties. In extreme cases it may appear solid and cured. Fluctuating temperatures (within 5 to 50 °C) aggravate this phenomenon. Heating the individual component to 50 to 60 °C while stirring can usually restore products to original state. Storage at 25 +/- 10 °C is optimum for most products.

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