

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

DESCRIPTION:

Resinlab® EP1290RC Clear is a two part unfilled epoxy adhesive designed to be compliant to the REACH regulation, and as of the date of this document it contains no raw materials listed on the ECHA Substances of Very High Concern list. This formula also complies with the ROHS 3 Directive (EU) 2015/863.

EP1290RC Clear cures at room temperature to a tough, semi-flexible material that bonds well to metals and plastics. It has good wetting to most surfaces and is free flowing to penetrate cavities, self-level and release trapped air. This product can withstand vibration and impact. It also has good resistance to water, salt spray, inorganic acids and bases and most organic solvents.

EP1290RC Clear was formulated to a 1A:1B volume mix ratio for use in side-by-side dispensing cartridges and meter/mix and dispense equipment. *EP1290RC Clear* will reach handle cure at room temperature within 48 hours. Cure time can be accelerated by the application of heat. Times and temperatures from 2 hours at 65 °C to 30 minutes at 100 °C are typical for most applications. Time to heat substrate must be taken into account. Cooler temperatures will also extend work time and increase cure times.

TYPICAL PROPERTIES:

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

Property:	Value:	Test Method or Source:
Color	Clear/Amber	Visual
Mix Ratio	Part A to Part B	Calculated
By weight	1.17 to 1	
By volume	1 to 1	
Cure Schedule	48 hours @ 25 °C 2 hours @ 65 °C 30 minutes @100 °C	
Viscosity – Part A	40,000 cps @1/s	Rheometer parallel plate 25mm
Viscosity – Part B	6,000 cps @1/s	455300006291
Viscosity - Mixed	14,000 cps @1/s	
Specific Gravity – Part A	1.16	Calculated
Specific Gravity – Part B	0.99	
Specific Gravity - Mixed	1.07	
Pot Life, defined as the time it takes for initial mixed viscosity to double	50 minutes	Rheometer parallel plate 25mm@1/s 455300006291
Gel Time	5 hours/100cc sample	Observed, cup and stick
Glass Transition Temperature/Tg	20 °C	453560822409 by DSC
Hardness	70 Shore D	455300006287/ASTM D2240
Tensile Properties:		4535601224470/ASTM D638
Strength	2,400 psi	
Elongation	39%	
Modulus	65,000 psi	
Lap Shear Strength		4535601224468/ASTM D1002
0.010" bond line Al to Al	3,000 psi	

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Compressive Properties:		4535601224467/ASTM D695
Yield Strength	19,500 psi	
Compressive Strength	29,500 psi	
Modulus	157,000 psi	
Operating Temperature Range	-60 to 150 °C**	
Relative Thermal Index (RTI)	90 °C **	UL746B, Table 7.1 Generic Value Based on Composition

** Operating Temperature Range is based on average design requirements and is not intended as a guarantee of suitability for all applications operating at that temperature.

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.

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.