

PC-3117 Epoxy-Modified Urethane
High-Temperature, Chemically-Resistant Adhesive

Technical Bulletin

Rev. Date: 6/13/2014

PC-3117 is a two-component, filled, epoxy-modified resin system that produces a tough, highly impact resistant elastoplastic with good high temperature properties (250-300°F). The system offers a combination of low viscosity and rapid gelation at room temperature, which allows for high productivity. The cured system has excellent chemical resistance to gas, oil, water/ammonia, hydrocarbons, and jet fuel.

Key Features

- Low Initial Mixed Viscosity
- Convenient 2:1 Mix Ratio, by Volume
- Excellent Adhesion to Galvanized Steel, Stainless Steel, and Aluminum
- Very Good Thermal Stability up to 149°C (300°F).
- Excellent Chemical Resistance to Water/Ammonia, Fuels, and other Hydrocarbons.



Typical Uncured Properties

Color	
PC-3117 Resin (Polyol Component)	Tan
PC-3117 Hardener (Isocyanate Component)	Clear
PC-3117 Mixed	Tan
Viscosity (Brookfield) @ 25°C ± 1°C (77°F ± 2°F); cPs	
PC-3117 Resin	4,100
PC-3117 Hardener	50
Density @ 25°C ± 1°C (77°F ± 2°F); Lbs./Gal. (g/cm ³)	
PC-3117 Resin	11.33 (1.36)
PC-3117 Hardener	10.20 (1.22)
PC-3117 Mixed	10.98 (1.32)

Mixing Specifications & Characteristics

Mix Ratio	
Parts by Weight	100 parts Resin : 44 parts Hardener
Parts by Volume	2.0 parts Resin : 1.0 part Hardener
Processing Time @ 25°C ± 1°C (77°F ± 2°F); min:sec	
Gel Time (144 gram mass; 250 mL beaker)	2:30
Full Cure	7 Days

Typical Cured Properties

Color	Tan
Hardness; Shore D	80–85

Processing Instructions

For good results, automatic mixing and dispensing equipment should be used. Please consult with Polyset technical staff before making final processing decisions.

Storage Information

Keep away from flames. Material should be used once container is opened. Long term storage of opened material should be under nitrogen. Shelf life of both PC-3117 Resin and PC-3117 Hardener is 6 months @ 25°C (77°F) in unopened containers.

Safety Information

Avoid direct contact. Use safety goggles or safety glasses with side shields and impervious gloves when handling PC-3117 Resin and PC-3117 Hardener. If skin contact occurs, wash with soap and water. If PC-3117 Resin or PC-3117 Hardener enters the eyes, flush with cool water for at least 15 minutes and call a physician immediately. Refer to product Safety Data Sheets for further information.

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