



Technical Data Sheet

BC PU Clear

Aliphatic Polyurethane Coating

1). Product Description

BC PU Clear is a two-component, high-gloss, aliphatic polyurethane coating designed to provide long-term protection against UV radiation, chemical attack, and weathering. It combines acrylic and aliphatic polyurethane resins to deliver outstanding gloss retention and durability, outperforming conventional acrylics, alkyds, epoxies, and polyester finishes.

The coating forms a tough, abrasion-resistant film that minimizes the buildup of dirt, dust, and airborne contaminants while maintaining excellent appearance over time.

2). Features & Benefits

- Excellent color and gloss retention.
- High resistance to UV radiation and weathering.
- Very good chemical and solvent resistance to mild spills and splashes.
- Excellent abrasion and impact resistance.
- Good flexibility and mechanical durability.
- Easy to apply by spray or roller.
- Long pot life even at elevated temperatures.
- Enhances lifespan of underlying epoxy or primer coatings.

3). Recommended Uses

BC PU Clear is recommended for use as a protective and decorative topcoat for:

- Metal, concrete, wood, and fiberglass surfaces.
- Industrial flooring systems and exposed structures.
- As a UV-stable topcoat over epoxy coatings and polyurethane membranes.
- Marine and offshore structures.
- Architectural surfaces requiring high gloss and durability.



4). Technical Data

Property	Test Method / Condition	Typical Value
Appearance	Visual	Clear, high-gloss finish
Color	—	Clear (other colors on request)
Components	—	Two-component system
Mixing Ratio (by volume)	—	4 : 1 (Part A : Part B)
Density (mixed)	ASTM D1475	~1.20 g/cm ³
Pot Life	@25°C	~10 hours
Touch Dry	@25°C	~1 hour
Full Cure	@20°C	16 hours
Finish	—	Glossy
Flash Point	ASTM D93	27°C

5). Surface Preparation

All surfaces must be sound, clean, dry, and free from dust, oil, grease, laitance, or any other contaminants.

- Steel surfaces: Cleaned by grit blasting or power wire brushing to remove rust and scale. Prime immediately with BC Zinc Rich Primer.
- Concrete surfaces: Mechanically prepared and primed using BC Epoxy Primer 349.
- Ensure substrate temperature is at least 3°C above dew point and above 5°C during application.

6). Application Instructions

- Mixing: Stir Part A thoroughly before adding Part B. Mix for 3–5 minutes until uniform.
- Thinning: Use BC Thinner up to 5% for spray or roller application.
- Application Methods: Airless spray, brush, or roller.
- Recommended Film Thickness: 60–100 microns per coat (DFT).
- Overcoating Interval: 8–24 hours depending on temperature and humidity.



7). Coverage

- Theoretical coverage at 100 µm DFT: 6–8 m²/kg
- Actual coverage depends on surface texture, porosity, and application method.

8). Shelf Life

- **12 months** from date of production in unopened, sealed containers.
- Store in dry, shaded conditions at temperatures between +5°C and +30°C.

9). Packaging

Component	Weight
Part A	16 kg
Part B	4 kg
Total Kit	20 kg set

10). Health & Safety

- Avoid inhalation of vapors and contact with skin or eyes.
- Use in well-ventilated areas and wear appropriate PPE (gloves, goggles, respirator).
- In case of contact, rinse immediately with water and seek medical advice if necessary.
- Refer to the BC PU Clear Safety Data Sheet (SDS) for detailed handling and storage information.

DISCLAIMER

The data presented in this sheet are based on laboratory testing and practical experience. Variations in substrate, application method, and environmental conditions may impact performance. Users are advised to carry out tests under their own conditions. Building Chemistry Industry's responsibility is limited to the product replacement in cases of proven manufacturing defect.

