



Technical Data Sheet

BC Epoxy Primer 349

Solvent-Free Epoxy-Based Surface Sealer and Primer

1). Description

BC Epoxy Primer 349 is a two-component, solvent-free, medium-viscosity epoxy primer designed to seal the porosity of concrete and other substrates, creating a strong, homogeneous, and adherent base layer for epoxy, polyurethane, and polyurea coating systems. It exhibits superior adhesion to a wide range of substrates and can be used as a scratch coat with the addition of graded quartz sand.

2). Uses

BC Epoxy Primer 349 is recommended for:

- Priming and sealing cementitious and concrete substrates.
- Adhesion coat over concrete, steel, or wood before epoxy, polyurethane, or polyurea coatings.
- Strengthening weak or porous surfaces.
- Base primer for epoxy floor coatings and waterproofing membranes.
- Primer for repair mortars, protective coatings, and lining systems.

3). Features and Benefits

- Excellent adhesion to concrete, screed, timber, and mild steel.
- Solvent-free formulation — low odor and safe for interior use.
- Medium viscosity for deep substrate penetration and effective sealing.
- High mechanical strength and water resistance.
- Excellent resistance to a wide range of chemicals, acids, and alkalis.
- Provides a uniform, transparent primer layer.
- Easy to apply by brush, roller, or spray.
- Extends the life and performance of top coatings.
- Suitable for both horizontal and vertical applications.
- High durability with excellent bonding characteristics.



4). Technical Data

Property	Test Method / Condition	Typical Value
Appearance	Visual	Brownish Fluid
Mix Density	ASTM D1475	1.40 ± 0.05 kg/L
Bond Strength	ASTM D4541 / Concrete Failure	> Cohesive Strength of Concrete
Application Temperature	-	+10°C to +35°C
Recoating Interval	@25°C	After approx. 8 hours
Pot Life	@25°C	45 Minutes
Coverage	Depends on substrate porosity	2 – 2.5 m ² /kg per coat
Mix Ratio (A:B)	By Weight	2 : 1 (Base : Hardener)
Thinning (if required)	-	Add up to 0.5 L BC Solvent 200 per kit
Curing Time	@25°C	Light traffic: 24 h / Full cure: 7 days

5). Surface Preparation

- All substrates must be clean, sound, and dry — free from dust, grease, oil, laitance, and loose particles.
- Remove weak or deteriorated concrete by mechanical grinding, shot blasting, or scarifying.
- New concrete must be cured for at least 21 days and have a moisture content below 5%.
- Repair cracks, holes, and surface defects with BC Repair Mortar.
- Steel surfaces should be abrasive-blasted to near white metal (SA 2½) and primed immediately before oxidation occurs.



Mixing

1. Pre-stir Part A (Base) thoroughly.
2. Add Part B (Hardener) completely into Part A.
3. Mix mechanically using a low-speed drill (300–400 rpm) with a suitable paddle for 2–3 minutes.
4. Scrape the sides and bottom to ensure a homogeneous blend.
5. Mix only full kits to maintain correct stoichiometry and ensure optimum performance.

6). Application

- Apply within the pot life by brush, roller, or spray.
- On porous surfaces, apply until full saturation is achieved.
- On dense or smooth substrates, apply a thin even coat.
- Two coats may be required for highly absorbent or rough surfaces.
- Allow to cure before overcoating — minimum 8 hours at 25°C.

Cleaning

- Clean tools and equipment immediately after use with BC Solvent 200.
- Hardened material must be removed mechanically.

Chemical Resistance (Summary)

Chemical	Resistance
Water / Sea Water	Excellent
Dilute Acids (5–10%)	Very Good
Alkalis (5–10%)	Very Good
Diesel, Oils & Grease	Excellent
Mild Detergents / Solvents	Good
Strong Acids & Solvents	Limited

7). Packaging

- 30 kg Kit (Part A: 20 kg + Part B: 10 kg)
- Supplied in metal pails with pre-measured components for easy mixing and use.



8). Storage & Shelf Life

- Store in a cool, dry, covered area away from direct sunlight and heat.
- Keep containers tightly sealed when not in use.
- Shelf life: 12 months in unopened containers under recommended storage conditions.
- Mix Part A thoroughly if stored for extended periods before adding Part B.

9). Health & Safety

- Avoid skin and eye contact; wear gloves, goggles, and protective clothing.
- Ensure adequate ventilation during application.
- In case of contact with skin, wash immediately with soap and water.
- If in eyes, rinse with plenty of water and seek medical attention.
- Do not inhale vapors or ingest material.
- Keep away from open flames and ignition sources.
- Refer to the Material Safety Data Sheet (MSDS) for detailed safety 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.

