



## Technical Data Sheet

### BC Poxy Zinc Rich 859

#### Two-Component Metallic Zinc-Rich Epoxy Primer

#### 1. Product Description

BC Poxy Zinc Rich 859 is a high-performance, two-component, metallic zinc-rich epoxy primer designed to provide long-term corrosion protection to steel substrates in both new construction and maintenance applications.

Formulated with high metallic zinc content, it offers galvanic protection and excellent adhesion, ensuring maximum durability in aggressive industrial, marine, and offshore environments.

#### 2. Features & Advantages

- Outstanding corrosion resistance due to high metallic zinc content.
- No mist coating required, saving application time.
- Compatible with multiple topcoats including epoxies, polyurethanes & chlorinated rubbers.
- Provides galvanic (cathodic) protection to steel substrates.
- Fast drying and easy to apply by airless spray, brush, or roller.
- Excellent adhesion strength and long-term durability in harsh environments.

#### 3. Typical Applications

Suitable for steel structures exposed to a wide range of corrosive environments:

- Offshore platforms, jetties, marine steel structures
- Petrochemical & refinery plants
- Power plants and desalination facilities
- Bridges & infrastructure steel
- Pulp & paper plants
- General structural steel & industrial equipment
- As a primer for multi-coat high-durability protective systems



## 4. Technical Data

Property	Value
Color	Grey
Mix Ratio (A: B)	80: 20 by weight
Pack Size	2 kg Kit (A = 1.97 kg, B = 0.20 kg)
Volume Solids	Approx. 64%
Appearance / Gloss	Matt
Recommended DFT per coat	35 – 50 microns
Induction Time	30 minutes
Pot Life @ 30°C	6 hours
Hard Dry @ 30°C	12 hours
Full Cure @ 30°C	7 days
Theoretical Spreading Rate	~13–18 m <sup>2</sup> /L @ 35–50 µm DFT
Flash Point	>23°C
Application Temperature	5°C – 45°C

## 5. Surface Preparation

- The substrate must be clean, dry, and free of oil, grease, dust, salts, and contaminants.
- Steel: Abrasive blast to Sa 2½ (ISO 8501-1) or SSPC-SP 6.
- Recommended surface profile: 50–75 microns (Rz).
- Apply primer immediately after blasting to avoid flash rusting.



## 6. Mixing Instructions

1. Stir Base Component A (zinc-rich base) thoroughly to re-disperse settled zinc dust.
2. Add Curing Agent B gradually into A while mixing.
3. Mix thoroughly for 3–5 minutes until fully uniform.
4. Allow 30 minutes induction time before application.
5. Maintain slow continuous agitation during application to prevent zinc settling.

## 7. Application Guidelines

### Application Methods

- Airless spray (recommended)
- Conventional spray
- Brush or roller (for touch-up & stripe coating)

### Airless Spray Parameters

- Tip size: 0.017–0.021 inch
- Pressure: 1800–2500 psi

### Film Thickness

- Apply 35–50 microns DFT per coat.

### Overcoating

- Minimum: 12 hours @ 30°C
- Maximum: 7 days  
(Ensure surface is clean and free from zinc salts before top coating.)

## 8. Storage & Shelf Life

- Store in tightly closed original containers at 5°C – 35°C.
- Keep away from direct sunlight & moisture.
- Shelf life: 12 months when stored properly.

## 9. Packaging

- 2 kg kit
  - Component A (Base): 1.97 kg
  - Component B (Hardener): 0.20 kg

(Customized pack sizes available upon request.)



## 10. Health & Safety

- Use in well-ventilated areas.
- Wear gloves, goggles, and protective clothing.
- Avoid inhalation of vapors and skin contact.
- In case of contact, wash thoroughly with soap and water.
- Refer to the product SDS for full safety instructions.
- Flammable—keep away from sparks and heat sources.

### 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.

