



Technical Data Sheet

BC Coat EPU-400

Solvent-Free Epoxy Coating System for Potable Water Structures

1. Product Description

BC Coat EPU-400 is a two-component, solvent-free epoxy coating system designed for lining and waterproofing potable water retaining structures. The system consists of Part A (Epoxy Resin) and Part B (Hardener) supplied in pre-measured quantities.

After curing, BC Coat EPU-400 forms a smooth, hygienic, non-toxic, and highly durable protective coating with excellent resistance to water, chemicals, corrosion, and abrasion. The cured film is suitable for direct contact with potable water and food-related environments.

2. Typical Applications

- Potable water tanks and reservoirs
- Water treatment plants
- Concrete and steel water retaining structures
- Silos and storage tanks
- Breweries and food processing facilities
- Damp concrete surfaces (SSD condition)

3. Features & Advantages

- 100% solids, solvent-free system
- Suitable for confined areas
- High-build epoxy coating
- Excellent adhesion to concrete and steel
- Smooth, satin, easy-to-clean surface
- Resistant to corrosion, chemicals, and abrasion
- Can be applied on damp (SSD) concrete
- Non-toxic after full cure



4. Technical Data

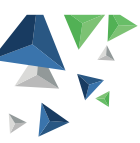
Property	Unit	Typical Value
Solids Content	%	100
VOC Content	g/L	≤ 12
Appearance	–	Smooth pourable liquid
Mix Ratio (A: B)	by weight	17:03
Pot Life @ 20°C	minutes	30 – 40
Pot Life @ 35°C	minutes	10 – 15
Application Method	–	Brush / Roller / Airless Spray
Number of Coats	–	2
DFT per Coat	microns	200
Total DFT	microns	400
Theoretical Coverage	m ² /L/coat	~5
Full Cure @ 20°C	days	7
Reaction with Potable Water	–	Safe after full cure

5. Surface Preparation

Concrete Surfaces

- Substrate must be sound, clean, fully cured, and laitance-free
- Remove oil, grease, curing compounds, and contaminants
- Grit blasting or mechanical preparation recommended
- Fill blow holes and surface defects with suitable repair mortar
- Surface may be SSD (damp) but free from standing water





Steel Surfaces

- Grit blast to SA 2.5 (ISO 8501-1)
- Coat immediately after surface preparation to avoid flash rust

6. Mixing

- Stir Part A thoroughly
- Add entire Part B into Part A
- Mix mechanically with slow-speed mixer for 3–5 minutes
- Scrape sides and bottom to ensure uniform consistency
- After mixing, pour material into shallow trays to extend pot life
- Do not leave mixed material in deep containers

7. Application

- Apply in two coats
- Each coat applied at approx. 200 microns WFT
- Maintain recommended coverage rates
- Overcoating intervals:

Temperature	Overcoating Time
10°C	18 – 72 hours
20°C	8 – 48 hours

- Minimum application temperature: 10°C
- Maximum application temperature: 30°C

8. Cleaning

- Clean tools immediately with approved epoxy solvent
- Cured material can only be removed mechanically

9. Limitations

- Do not apply over existing coatings
- Do not apply if RH > 90%
- Not color-stable under UV exposure
- Do not apply below 10°C or on falling temperatures
- Ensure moisture vapor can escape from substrate



10. Packing

Component	Packing
Part A – Epoxy Resin	17 kg
Part B – Hardener	3 kg
Total Pack Size	20 kg (pre-measured set)

11. Storage & Shelf Life

- Store in original sealed containers
- Storage temperature: 5°C – 30°C
- Protect from direct sunlight and moisture
- Shelf life: 12 months under recommended conditions

12. Health & Safety

- Wear gloves, goggles, and protective clothing
- Ensure adequate ventilation during application
- Avoid skin and eye contact
- In case of contact, rinse with clean water and seek medical advice
- Refer to Safety Data Sheet (SDS) before use

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.

