



## Technical Data Sheet

### BC EPOXY 140 SL

#### Epoxy Crack-Bridging and Chemically Resistant Self-Levelling Coating

#### 1). Product Description

BC Epoxy 140 SL is a two-component, solvent-free, self-smoothing epoxy resin coating designed to provide a hard-wearing, seamless, and chemically resistant flooring system. It offers excellent mechanical strength, abrasion resistance, and crack-bridging properties.

The coating forms a glossy, dense, and impervious finish suitable for industrial, commercial, and institutional floors subjected to chemical and mechanical loads.

#### 2). Features & Advantages

- High chemical and mechanical resistance.
- Excellent crack-bridging ability and flexibility.
- Seamless, easy-to-clean, and hygienic surface.
- Very good abrasion and impact resistance.
- 100% solids – solvent-free formulation.
- Low VOC and environmental compliance.
- Gloss or slip-resistant finish (when broadcast with silica).
- Excellent adhesion to concrete and cementitious screeds.

#### 3). Recommended Uses

BC Epoxy 140 SL is ideal for:

- Industrial floors exposed to mechanical wear and chemical spillages.
- Chemical processing areas and laboratories.
- Food and beverage industries (indirect food contact).
- Warehouses, workshops, and logistics centers.
- Pharmaceutical and healthcare facilities.
- Car parks, maintenance workshops, and hangars.



#### 4). Technical Data

Property	Test Method / Standard	Typical Values
Chemical Base	—	Solvent-free epoxy resin
Appearance	—	Gloss finish, colored liquid
Color	—	Available in standard colors
Mixing Ratio (A: B)	—	16: 4 (by weight)
Density (Mixed)	—	~1.60 kg/L
Solids Content (by volume)	—	~100%
Shore D Hardness (14 days, 23°C)	EN ISO 868	~60
Flexural Strength (7 days, 23°C)	ISO 178	~10 MPa
Tensile Adhesion Strength	EN 1542	>1.5 N/mm <sup>2</sup> (concrete failure)
Crack Bridging	ZG DIBt	0.2 mm
Compressive Strength	—	~70 N/mm <sup>2</sup>
Service Temperature	—	Up to +60°C (dry service)
Chemical Resistance	Internal Method	Excellent against most acids, alkalis, oils, and fuels
VOC Content	ASTM D3960	0% (VOC-free)

#### 5). Application Instructions

##### Surface Preparation

- Substrate must be sound, clean, dry, and free from oil, grease, dust, and contaminants.



- Concrete compressive strength must be  $\geq 25 \text{ N/mm}^2$  and tensile strength  $\geq 1.5 \text{ N/mm}^2$ .
- Prepare surface by shot blasting or mechanical grinding to achieve a clean, textured profile.

### Mixing

- Stir Part A (base) thoroughly.
- Add Part B (hardener) and mix continuously for 3 minutes using a low-speed drill (300–400 rpm).
- Pour into a clean container and remix for 1 additional minute for full homogenization.

### Application

- Pour mixed material onto the prepared substrate.
- Spread evenly using a notched trowel or squeegee.
- Back-roll using a short pile roller or spike roller to release trapped air and ensure uniform thickness.

### Application Data

Condition	Range / Time
Product Temperature	+10°C to +30°C
Ambient Temperature	+10°C to +30°C
Substrate Temperature	+10°C to +30°C
Relative Humidity	$\leq 80\% \text{ RH}$
Pot Life	~30 min at +20°C
Recoating Interval	+10°C: 48 hr – 3 days +20°C: 30 hr – 48 hr +30°C: 20 hr – 30 hr
Light Traffic	~48 hours at +20°C
Full Cure	~10 days at +20°C

### Chemical Resistance (Typical Performance)

Chemical	Resistance
Hydrochloric Acid (10%)	Excellent
Sulphuric Acid (5%)	Excellent
Sodium Hydroxide (20%)	Excellent
Lactic Acid (5%)	Very Good

Note: For specific chemical exposure, consult BCI Technical Department.



## 6). Coverage

- Self-smoothing layer: ~1.6 kg/m<sup>2</sup> per mm.
- Seal coat (roller applied): ~0.75–0.85 kg/m<sup>2</sup>.

Actual coverage may vary with substrate condition and application method.

## 7). Packaging

Supplied in 20 kg kit:

- Part A (Base): 16 kg
- Part B (Hardener): 4 kg

## 8). Storage & Shelf Life

- Store in original, tightly sealed containers.
- Keep in dry, cool conditions between +5°C to +30°C.
- Shelf life: 24 months from production date (unopened).

## 9). Health & Safety

- Use with adequate ventilation; avoid contact with skin and eyes.
- Wear suitable gloves, goggles, and protective clothing.
- In case of contact, wash immediately with plenty of water.
- Refer to the Safety Data Sheet (SDS) for further 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.

