

Technical Data Sheet

BC Epoxy FC 145

High-Performance, Solvent-Free Epoxy Floor Coating

1). Description

BC Epoxy FC 145 is a two-component, colored epoxy resin system designed for high-performance flooring applications. It is suitable for hot and tropical climates and provides a durable, chemical-resistant, and easy-to-clean surface. The system produces a gloss finish and can be modified with optional slip-resistant aggregates for improved safety.

BC Epoxy FC 145 is ideal for industrial and commercial areas where heavy foot traffic, light vehicular traffic, or chemical exposure occurs.

2). Uses

BC Epoxy FC 145 is suitable for:

- Roller coating of concrete and cement screeds with normal to medium-heavy wear (storage areas, workshops, garages, and loading ramps)
- Seal coating for broadcast systems in multi-story or underground car parks, maintenance hangars, and wet process areas in the food and beverage industry
- Protective coating for bunds, coves, and drains within production areas
- Slip-resistant applications using quartz sand or anti-slip aggregates

3). Advantages

- Excellent chemical and mechanical resistance
- Attractive gloss finish; can be made slip-resistant
- Long-term durability under heavy foot and light vehicle traffic
- Solvent-free and low VOC (<100 g/L), compliant with LEED.





4). Technical Information

Property	Value	Test Method
Solids Content	100% (w/w and v/v)	-
Density	Part A: ~1.64 kg/L; Part B: ~1.00 kg/L; Mixed: ~1.40 kg/L	-
Shore D Hardness	~76 (7 d / +23°C)	DIN 53 505
Abrasion Resistance	~41 mg (CS 10 / 1000 / 1000)	DIN 53 505
Compressive Strength	~53 N/mm ² (28 d / +23°C)	EN 196-1
Flexural Tensile Strength	~20 N/mm ² (28 d / +23°C)	EN 196-1
Tensile Adhesion Strength	>1.5 N/mm ² (failure in concrete)	ISO 4624
Chemical Resistance	Good; consult technical dept.	-
Temperature Resistance	Dry: +50°C permanent, +80°C short-term; Moist: up to +80°C occasional	-

5). Application Information

Mixing Ratio: Part A: Part B = 4: 1 (by weight)





Pot Life & Curing Times

Temperature	Pot Life	Foot Traffic	Light Traffic	Full Cure
+20°C	~24 h	~24 h	~4 d	~7 d
+30°C	~16 h	~18 h	~2 d	~5 d

Coverage:

- 0.58-0.6 m²/kg at DFT of 1 mm Thickness.

Substrate Requirements

- Concrete compressive strength ≥ 25 N/mm²
- Clean, dry, and free from contaminants
- Substrate temperature: +10°C to +35°C
- Relative humidity $\leq 80\%$

6). Application Instructions

1. Surface Preparation:

- Remove all contaminants (dust, laitance, oil, grease)
- Repair voids, blowholes, and defects using suitable repair mortars
- Abrasive blasting or scarifying recommended

2. Priming:

- Apply a compatible epoxy primer (e.g., BC Epoxy Primer) for pore-free coverage

3. Mixing:

- Stir Part A mechanically
- Add Part B to Part A and mix continuously for 3 minutes
- Optional: add quartz sand or extender and mix for 2 more minutes



4. Application:

- Apply with a short-pile roller (crosswise)
- For slip-resistant finish, broadcast anti-slip aggregates onto wet coating
- Seal coat: squeegee then back roll for uniform coverage

7). Packaging & Storage

- 20 kg unit: Part A 16 kg, Part B 4 kg
- Shelf Life: 12 months from production date
- Storage Conditions: Dry, +5°C to +30°C, in original unopened packaging

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.

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