



Technical Data Sheet

BC BOND SUPER

Multi-Purpose Polyvinyl Acetate (PVA) Emulsion Bonding Agent and Admixture

1. Product Description

BC Bond Super is a high-quality polyvinyl acetate (PVA) emulsion adhesive designed for use as a bonding agent, surface sealer, primer, and admixture for cement screeds, renders, plasters, mortars, and concrete.

It enhances adhesion between old and new concrete, improves strength and durability, and reduces surface permeability. BC Bond Super is suitable for use in hot and tropical climates and provides a versatile, economical solution for a wide range of construction and repair applications.

2. Features & Benefits

- Multi-purpose formulation – bonding agent, primer, sealer, admixture
- Improves adhesion to most substrates including concrete, stone, and brick
- Enhances strength and durability of cementitious layers
- Reduces permeability and shrinkage cracking
- Quick drying and easy to apply
- Safe, non-toxic, and water-based formulation
- Economical and effective for multiple site applications
- Suitable for interior and exterior use
- Excellent workability and surface compatibility

3. Recommended Uses

- Bonding agent for new concrete, render, or plaster to old concrete
- Primer and sealer for porous surfaces before finishing
- Admixture for cement–sand screeds, mortars, and renders
- Surface sealer for dusty or friable concrete
- Primer for bituminous coatings to prevent bleed-through
- Bonding coat for thin toppings, underlays, and patch repairs



4. Technical Properties

Property	Test Standard / Method	Typical Value
Appearance	Visual	White liquid
Base		Polyvinyl Acetate (PVA) Emulsion
Density	ASTM D1475	~1.03 kg/L at 25°C
pH	ASTM E70	4.5 – 6.0
Solids Content	ASTM D2369	~45 – 50%
Viscosity	ASTM D2196	500 – 700 cP
Bond Strength (Old to New Concrete)	ASTM C882	≥ 2.0 MPa
Compressive Strength (Modified Mortar)	ASTM C109	30 MPa (28 days)
Flexural Strength	ASTM C348	≥ 7 MPa
Toxicity		Non-toxic
Water Resistance		Excellent after curing
Compatibility		Fully compatible with OPC & blended cements
Service Temperature		+5°C to +45°C

5. Application Guidelines

Surface Preparation

- The substrate must be sound, clean, and free of oil, grease, dust, and loose material.
- Remove all paint, laitance, and weak layers by mechanical cleaning.
- Ensure the surface is dry or slightly damp, but free of standing water before application.



Mixing & Application Ratios

Application Type	Dilution Ratio (BC Bond Super : Water)	Description / Instructions
Surface Sealer	1: 4	Apply by brush or roller to seal porous, dusty concrete. Allow to dry completely.
Bonding Agent	1: 2	Apply a tack coat before applying screed, plaster, or render. Lay new material while bonding coat is tacky.
Concrete-to-Concrete Bonding	1: 1	Brush a bonding coat onto the old concrete surface. Place new concrete while tacky.
Bitumen Primer	1: 1	Apply to prevent bleed-through from bituminous surfaces before painting or coating.
Admixture in Mortar / Screed	20–30% by weight of cement	Improves adhesion, tensile strength, and durability. Reduces cracking and shrinkage.

Application Procedure

- Apply using a brush, roller, or spray depending on the surface and purpose.
- For bonding applications, always place cementitious toppings or plaster while the coat is still tacky.
- For surface sealing, allow each coat to dry completely before applying the next.
- For high-strength toppings or industrial screeds, ensure the substrate is mechanically roughened and clean.

6. Coverage

Application	Approximate Coverage
Neat application	1 L per 6 – 12 m ²
Diluted 1:1	1 L per 16 – 24 m ²
Diluted 1:3	1 L per 24 – 40 m ²

Coverage varies depending on substrate texture and porosity.



7. Packaging

Packaging Type	Net Content
Plastic Can	5 L
Plastic Drum	20 L
Drum	200 L

8. Storage & Shelf Life

- Store in a cool, dry, and well-ventilated area between +5°C and +45°C.
- Protect from frost, direct sunlight, and contamination.
- Shelf life: 12 months in unopened, original packaging.
- Stir well before use.

9. Health & Safety

- Non-toxic, water-based product.
- Avoid prolonged contact with skin or eyes.
- Use gloves and goggles during handling.
- In case of eye contact, rinse immediately with clean water and seek medical attention if irritation persists.
- Clean tools and equipment with water immediately after use.
- Refer to the Material Safety Data Sheet (MSDS) for more 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.

