

# Technical Data Sheet

## BC GRP Line White

### Polyester Based High Chemical Resistant Coating

#### 1. Product Description

BC GRP Line White is a three-component, high chemical resistant polyester coating with inert fillers and fiberglass reinforcement. It is designed for use under BC GRP systems on properly prepared carbon steel and concrete substrates in atmospheric and immersed environments.

It is ideal for the internal lining of chemical storage tanks, pipelines, and structural steelwork requiring superior resistance to chemical attack. The coating offers excellent resistance to both aliphatic and aromatic organic solvents, as well as concentrated organic and inorganic acids.

#### 2. Features & Advantages

- Outstanding resistance to aggressive chemicals, acids & solvents
- High mechanical strength with excellent durability
- Suitable for immersed & atmospheric conditions
- Excellent adhesion to steel and concrete substrates
- Reinforced laminate system for maximum protection
- High impermeability & long-term corrosion resistance
- 100% reactive solids – low shrinkage, high build
- Fast curing and easy installation

#### 3. Physical & Technical Data

Property	Value
Color	White
Gloss Level	Semi-Gloss
Volume Solids	100% reactive (~85% converts to solid)
Specific Gravity (Mixed)	1.05 kg/L
Tensile Strength	≥ 80 N/mm <sup>2</sup> (BS 5480)



VOC (EPA Method 24)	425 g/L
Barcol Hardness	≥ 40 (ASTM D2583)
Thermal Conductivity	0.22 W/m·K (ASTM C518)
Acid Value (Uncatalyzed)	25-30 MG koh/G (bs 2782)

#### 4. Application Guide

Mixing Ratio (by weight):

Base: Accelerator: Hardener = 100: 0.4: 1.8

1. Mix Base and Accelerator thoroughly before adding Hardener.
2. Apply with trowel for basecoat; brush or roller for laminate/resin saturant.
3. Ensure proper film thickness to achieve required chemical and mechanical performance.

Pot Life: 25°C → 30 min, 35°C → 20 min

Curing Profile:

Substrate Temp	Surface Dry	Through Dry	Fully Cured	Min Recoat	Max Recoat
25°C	1 h	4 h	7 days	4 h	7 days
35°C	15 min	3 h	7 days	3 h	7 days

#### 5. Surface Preparation

##### Steel Surfaces:

- Abrasive blast clean to Sa 2½ (ISO 8501-1:2007) or SSPC-SP6.
- For optimum adhesion, Sa 3 (SSPC-SP10) with a profile of 75–100 µm recommended.
- Re-blast if oxidation occurs prior to coating.
- Repair surface defects with grinding or appropriate filling.



### Concrete Surfaces:

- Abrasive blasting or scarification to remove laitance and contaminants.
- Concrete must be fully cured, dry, and free from oils, dust, curing compounds, or mold release agents.
- Verify dryness using ASTM D 4263 (plastic sheet test).
- Re-test until concrete is moisture free.

### Environmental Conditions:

- Minimum surface temp: 3°C above dew point.
- Do not apply if temp <10°C or RH >80%.
- Overcoat as soon as hard-dry if substrate temp >35°C.

## 6. Coating System & Coverage

Coating Type	Film Thickness (µm)	Theoretical Coverage (kg/m <sup>2</sup> )
Basecoat (Base + Talcum Powder)	150–300 dry	0.40 @ 300 µm DFT
Laminate (Base saturated mat)	1600–1800 dry	2.20 @ 1800 µm DFT
Surface Mat + Base	150–200 dry	0.30 @ 200 µm DFT
Topcoat (Base only)	88–117 dry	0.30

## 7. Packaging

Component	Pack Size
Base	20 kg
Accelerator	0.08 kg
Hardener	0.36 kg

## 8.Storage & Shelf life

- Shelf Life: 6 months at 25°C (Base, Accelerator, Hardener)
- Store in a dry, cool, well-ventilated area, away from heat and ignition sources.
- Recommended storage temperature: 10–15°C to prolong shelf life.
- Never mix Accelerator directly with peroxide catalysts (risk of violent reaction).



## 9. Safety & Precautions

- Refer to container label and Safety Data Sheet before use.
- Use appropriate PPE: gloves, goggles, and protective clothing.
- Avoid contact with skin and eyes. In case of contact, rinse immediately and seek medical advice.
- Keep away from sparks, flames, 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.

