



# Technical Data Sheet

## BC GRP Line Primer

### High-Performance Vinyl Ester Primer for GRP Lining Systems

#### 1). Product Description

BC GRP Line Primer is a three-component, high-performance Vinyl Ester primer formulated with inert fillers and fiberglass reinforcement. It is designed as the base primer for BC Line GRP systems, providing superior adhesion, chemical resistance, and long-term durability.

The primer is suitable for carbon steel and concrete substrates, in both immersed and atmospheric environments, including chemical storage tanks, pipelines, GRP lining works, structural steel, and secondary containment areas.

#### 2). Features & Benefits

- Outstanding chemical resistance to wide range of acids, alkalis, and solvents
- High adhesion to steel and concrete
- 100% reactive solids system
- Reinforced with fiberglass for enhanced mechanical durability
- Fast curing – reduces downtime
- Suitable for immersion service
- Excellent compatibility with BC GRP laminates
- Suitable for extreme chemical environments

#### 3). Technical Properties

Property	Value
Volume Solids	100% reactive (~85% converted to solid)
Specific Gravity (mixed)	1.25 kg/L
Flash Point	Base: 33°C • Hardener: 57°C • Mix: 33°C
VOC (EPA Method 24)	90 g/L



Mixing Ratio (by weight)	Base : Accelerator : Hardener = 100 : 0.4 : 1.8
Thinner	Do not thin
Cleaner	BC Line GRP Thinner (Vinyl Ester Thinner)

#### 4). Recommended System Build-Up

1. Basecoat (Base + Talcum Powder)
  - DFT: 150–300 µm
  - Coverage: 0.40 kg/m<sup>2</sup> @ 300 µm
2. Laminate Layer (with GRP Mat)
  - Two layers of CSM
  - DFT: 1600–1800 µm
  - Coverage: 2.20 kg/m<sup>2</sup>
3. Surface Mat Layer
  - DFT: 150–200 µm
  - Coverage: 0.30 kg/m<sup>2</sup>
4. Topcoat (Base Only)
  - 1–2 layers
  - DFT: 75–100 µm per layer

#### Curing Schedule

Condition	25°C	35°C
Surface Dry	1 hour	45 minutes
Through Dry	4 hours	3 hours
Min. Recoat Time	4 hours	3 hours
Max. Recoat Time	7 days	7 days
Full Cure	7 days	7 days

#### 5). Surface Preparation

##### Carbon Steel

- Abrasive blast cleans to Sa 2½ (ISO 8501-1)  
*Optimum: SSPC-SP10*
- Surface profile: 75–100 µm
- Remove oil/grease via SSPC-SP1
- Re-blast if oxidation appears before coating



## Concrete

- Must be sound, clean, dry and fully cured
- Remove laitance, contamination and weak layers
- Prepare surface via shot blasting, grinding, or scarification
- Moisture checks via ASTM D4263 (Plastic Sheet Test)

## Environmental Requirements

- Do not apply below 10°C or RH above 80%
- Surface temperature must be 3°C above dew point
- For temperatures >35°C: overcoat immediately when hard-dry

## 6). Application Procedure

- Mix Base + Accelerator thoroughly
- Add Hardener slowly while mixing
- Never mix Accelerator directly with Hardener
- Tools:
  - Trowel for basecoat
  - Brush/roller for laminate resin
  - Consolidating roller for mat lamination
- Ensure the required DFT is achieved for each layer

## 7). Packaging

Component	Weight
Base	20 kg
Accelerator	0.08 kg
Hardener	0.36 kg

## 8). Shelf Life & Storage

- Shelf Life: 6 months at 25°C
- Store in cool, dry, well-ventilated area
- Keep away from heat, direct sunlight, and sources of ignition
- Recommended storage temperature for Base: 10–15°C
- Do not allow repeated temperature cycling
- Product may gel prematurely if exposed to high temperatures



## 9). Safety Information

- Use gloves, goggles, and chemical-resistant protective clothing
- Ensure adequate ventilation
- Avoid contact with skin and eyes
- Refer to Safety Data Sheet (SDS) before use
- Never mix Accelerator directly with MEKP or any peroxide catalyst.

### 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.

