Technical Data Sheet

BC MC Urethane

High-Performance Polyurethane Liquid Waterproofing

1). Description

BC MC Urethane is a single-component, high-quality, moisture-curing polyurethane waterproofing membrane. Once applied, it reacts with atmospheric humidity to form a durable, elastic, and seamless film with excellent adhesion to a wide range of construction substrates.

The product is based on pure elastomeric hydrophobic polyurethane resins combined with high-grade inorganic fillers, delivering superior UV resistance, weathering stability, and long-term flexibility.

BC MC Urethane can be applied by brush, roller, or airless spray.

2). Typical Uses

BC MC Urethane is recommended for waterproofing and protection of:

- Roofs and exposed terrace areas
- Metal or fibrous cement sheet roofs
- Bathrooms and wet areas
- Gypsum boards and cement boards
- Polyurethane foam insulation surfaces
- Light traffic pedestrian areas

3). Advantages

- Excellent adhesion to all properly primed substrates
- High UV and weather resistance
- Forms a seamless, elastic and durable membrane
- Reflective white/grey colors help reduce building heat load
- High mechanical strength: tear, tensile & abrasion resistance
- Remains flexible at low temperatures down to -40°C
- Breathable membrane allowing controlled moisture vapor transmission
- Easy to apply by brush, roller, or airless spray

4). Technical Properties (25°C, 55% Rh)

Property	Test Method	Result
Color	-	White, Grey, Black (variable)
Specific Gravity	-	1.35 ± 0.05
Tack-Free Time	-	6 – 8 hours
Recoat Time	-	8 – 24 hours
Service Temperature	-	-40°C to +80°C
Non-Volatile Solids Content	ASTM D2369	≥ 85% (Pass)
Shore Hardness (28 days)	ASTM D2240	Shore A: 40 ± 5 (White/Grey) • 45 ± 5 (Black)
Tear Strength	ASTM D624	≥ 10 kN/m
Tensile Strength	ASTM D412	≥ 2 MPa @ 7 days
Elongation	ASTM D2370	> 400%
Bond Strength*	ASTM D4541 / BS EN ISO 4624	≥ 0.8 MPa @ 7 days
Crack Bridging	ASTM C1305	Pass @ 23°C (3.2 mm)

5). Application Guidelines

Surface Preparation

- Surfaces must be clean, dry, sound, and free from dust, grease, laitance, curing compounds, and loose material.
- Maximum substrate moisture: ≤ 5%
- New concrete must cure at least 28 days.

Priming

Recommended primers:

- BC PU Primer SB (solvent-based polyurethane primer)
- BC Epoxy Primer W (water-based epoxy primer)

Application rate:

- BC PU Primer SB: 0.10 – 0.20 L/m²
- BC Epoxy Primer W: 0.16 L/m²

Allow primer to cure:

- 24 – 48 hours depending on temperature and humidity.

Application Method

- Apply using brush, roller, or airless spray.
- Mix slowly if needed (max 300 rpm).
- Apply minimum two coats.
- Do not exceed 24 hours between coats.

6). Consumption

- First Coat: 0.7 – 0.8 kg/m²
- Second Coat: 0.7 – 0.8 kg/m²
- Total: 1.4 – 1.6 kg/m² for approx. 1.0 mm dry film thickness

7). Packing

- 20 kg pail (standard BCI packing).

8). Storage & Shelf Life

- Store in dry, shaded conditions between +5°C and +25°C.
- Shelf life: 12 months in original sealed container.

9). Health & Safety

- Apply in well-ventilated areas.
- Keep away from open flames and ignition sources.
- Wear appropriate PPE: gloves, goggles, and respirators when needed.
- Refer to the product Safety Data Sheet for further information.