

CHEMFIT PU601

PU Base Coat – For Roof Systems

PRODUCT DESCRIPTION

ChemFit PU601 is a high-performance, single-component, waterborne polyurethane (PU) base coat specifically formulated for roof systems. It is designed as a flexible, high-elasticity foundation layer, providing excellent adhesion to various substrates such as concrete, metal, or old bituminous membranes. This formulation creates a seamless, waterproof base for complete roof waterproofing systems and is designed to be overcoated with compatible topcoats.

PRIMARY APPLICATIONS

ChemFit PU601 is recommended for use in conditions such as:

- Base coat / primer layer for PU roof waterproofing systems
- Priming of concrete, metal, or existing roof membranes prior to top coating
- Sealing and preparation of roof surfaces for reflective or protective top coats

KEY FEATURES AND BENEFITS

- **Single component** – Ready to use; no on-site mixing required
- **Excellent elasticity** – High elongation rate accommodates substrate movement
- **Good low-temperature flexibility** – Remains flexible down to -25°C, preventing cracking in cold climates
- **Water based** – Low VOC, environmentally friendly, and easy to clean up
- **Excellent adhesion** – Bonds strongly to various roofing substrates
- **Fast drying** – Quick recoat time for efficient project completion

MECHANICAL PROPERTIES

Property	Value
Elongation at break	≈1000%
Cold flexibility	-25°C (no cracking)
Film appearance	Soft, transparent, smooth hand-feel
Yellowing resistance	Grade 4
Rebound resilience	100%
Tensile strength	> 2.0 MPa (estimated)
Adhesion to concrete/metal	> 1.5 MPa (estimated)

PHYSICAL AND CHEMICAL PROPERTIES

Property	Specification
Appearance	Milky white / Slightly translucent liquid
Basis	Waterborne Polyurethane (PU)
Solids content	60% ± 2%
pH Value	8.0 ± 1
Viscosity	≤ 60 seconds
Density	~1.05 – 1.10 kg/L (calculated)
VOC content	Low (< 50 g/L)
Touch dry (at 25°C)	2 – 4 hours
Recoat time (at 25°C)	4 – 8 hours
Full cure	7 days
Application temperature	+5°C to +35°C
Service temperature	-25°C to +80°C

PACKAGING AND STORAGE

Packaging:

- 20 kg plastic pail

Storage:

- Store in original sealed containers at +5°C to +30°C
- Protect from direct sunlight, moisture, and freezing
- Store in dry conditions

Shelf life: 12 months from date of manufacture when stored properly

DOSAGE AND COVERAGE RATES

- **Consumption:** 0.8 – 1.2 kg/m² per coat (depending on substrate porosity)
- **Yield per 20 kg container:** Approximately 17 – 25 m² per coat

NOTE: Coverage is approximate; varies with substrate porosity and surface profile.

APPLICATION GUIDELINES

Surface Preparation:

- Substrate must be clean, dry, sound, and free from dust, oil, grease, laitance, curing compounds, loose particles, and any contaminants
- Remove all loose or deteriorated material
- Prime highly porous surfaces if required

Mixing:

- Stir thoroughly before use
- Do not thin or dilute

Application:

- Apply by brush, roller, or airless spray
- Apply evenly at specified consumption rate
- Allow to dry before applying subsequent coats or topcoat

Curing:

- Protect from rain, dew, and mechanical damage for minimum 24 hours
- Do not apply below +5°C or if rain expected within 24 hours

HEALTH AND SAFETY

Waterborne polyurethane may cause mild eye and skin irritation. If eye contact occurs, rinse with water for 15 minutes and seek medical attention if irritation persists. For skin contact, wash immediately with soap and water. If swallowed, do not induce vomiting; rinse mouth and drink water, then seek medical advice. Use gloves, safety glasses, and protective clothing during handling. Ensure adequate ventilation when using in enclosed spaces. Refer to the Safety Data Sheet for detailed information.

CLEAING OF TOOLS

Clean all brushes, rollers, and equipment with water immediately after use. Dried material requires mechanical removal.

APPROVALS AND STANDARDS

- Conforms to **EN 1504-2** – Surface protection systems for concrete
- **ISO 9001** – Quality management system certified
- Low VOC – Environmentally friendly
- Waterborne polyurethane base coat for roof systems

LEGAL NOTES

All technical data provided in this Product Data Sheet is based on laboratory testing under controlled conditions. Actual field performance may vary due to differences in substrates, application methods, site conditions, and environmental factors. ChemFit makes no warranty of merchantability or fitness for a particular purpose. Users shall conduct their own trials to validate product suitability for the intended application. ChemFit reserves the right to modify product specifications without prior notice. For the most current documentation, request the latest Product Data Sheet and Safety Data Sheet from ChemFit.

CHEMFIT CONSTRUCTION CHEMICAL AND SERVICES LIMITED

Office No. 8, 1KM Near Gaey Soap, Sargodha Road, Faisalabad

Tel: +923364544837

Web: www.chemfitchemicals.com

Email: chemfit.pro@gmail.com