CHEMFIT LASTIC 601-BC

High Performance, Cold Applied, Seamless, Highly Elastic Liquid Roof Waterproofing Base Coat – For Waterproofing Roofs in New Construction and Refurbishment

PRODUCT DESCRIPTION

ChemFit Lastic 601-BC is a high performance, cold applied, seamless, highly elastic liquid roof waterproofing base coat based on advanced polyurethane technology. This one-component, moisture-triggered aliphatic polyurethane formulation is specifically designed as a base coat for exposed and built-up roof systems. The cold applied, solvent-free formulation eliminates the need for heat or flame during installation. It cures rapidly using atmospheric moisture to form a seamless, highly elastic foundation for complete roof waterproofing systems. The red color provides visual contrast to ensure uniform coverage.

PRIMARY APPICATIONS

ChemFit Lastic 601-BC is recommended for use in conditions such as:

- Base coat for exposed and built-up roof systems (new construction and refurbishment)
- Part of multi-layer waterproofing systems with reinforcement fabric
- Roofs displaying complex detail areas and geometry with limited accessibility
- Cost-effective life cycle extension of failing or aged roofs
- Overcoating of existing sound bituminous membranes

KEY FEATURES AND BENEFITS

- **Cold applied** – Requires no heat, flame, or hot bitumen; eliminates fire risk
- **Single component** – No on-site mixing; ready to use
- **Highly elastic** – Retains flexibility even at low temperatures (-30°C)
- **Crack bridging** – Accommodates substrate movement without failure
- **Fast curing** – Rain resistant in approximately 10 minutes after application
- **Seamless membrane** – Forms a fully bonded, joint-free waterproofing layer
- **Good adhesion** – Bonds to concrete, metal, bitumen, and other substrates with appropriate primer
- **High root resistance** – Suitable for green roof applications
- **Color contrast** – Red color provides visual verification of coverage during application
- **Vapour permeable** – Allows substrate to breathe while remaining waterproof

PHYSICAL AND CHEMICAL PROPERTIES

Property	Specification
Appearance	Liquid
Color	Oxide red (RAL 3011)
Basis	One-component, moisture-triggered aliphatic polyurethane
Density	~1.4 kg/L
Solids by volume	~100% (solvent-free)
VOC content	Low
Touch dry (at 20°C/50% r.h.)	3 hours
Rain resistant (at 20°C/50% r.h.)	10 minutes
Recoat time (at 20°C/50% r.h.)	6 hours minimum
Full cure	7 days
Application temperature	+5°C to +35°C
Substrate temperature	+5°C to +60°C; ≥3°C above dew point
Relative humidity	5% – 85% max.
Substrate moisture	≤4% (no rising moisture)
Service temperature	-30°C to +80°C

MECHANICAL PROPERTIES

Property	**Value**
Tensile strength	9.0 – 12.1 N/mm²
Elongation at break	38 – 84%
Tear strength	26 – 52 N/mm
Water vapour transmission (μ)	~3,500 – 4,700
Root resistance	High root resistance (FLL approved)

PACKAGING AND STORAGE

Packaging:

- 15 L container

Storage:

- Store in original sealed containers at 0°C to +25°C
- Protect from direct sunlight, moisture, and freezing

- Store in dry conditions
- Higher storage temperatures may reduce shelf life

Shelf life: 9 months from date of manufacture when stored properly

DOSAGE AND COVERAGE RATES

- Single coat consumption (base coat for reinforced system): ≥1.0 L/m² (approx. ≥1.4 kg/m²)
- Yield per 15 L container at 1.0 L/m²: Approximately 15 m² per coat

NOTE: Coverage is approximate; varies with substrate porosity, surface profile, and application method. These figures are theoretical and do not include additional material required due to surface porosity, surface profile, variations in level, and wastage

APPLICATION GUIDLINES

Surface Preparation:

- Substrate must be sound, clean, dry, and free from dust, oil, grease, laitance, curing compounds, loose particles, and any contaminants
- Concrete: mechanically abrade (shot blasting or grinding) to achieve open texture; moisture content ≤4%; no rising moisture
- Substrate temperature must be at least +3°C above dew point to prevent condensation
- Apply compatible primer as per primer chart

Priming:

- Refer to primer chart for specific substrate recommendations
- Allow primer to cure completely before applying base coat

Mixing:

- Stir thoroughly before use
- Do not thin or dilute with any solvent
- Use immediately after opening

Application:

- Apply by brush, solvent-resistant roller, or airless spray
- Begin with details (penetrations, drains, flashings) before applying to horizontal surfaces
- Apply base coat at ≥1.0 L/m² (≥1.4 kg/m²)
- Embed reinforcement fabric into wet base coat
- Ensure fabric is fully saturated with no air bubbles
- Allow base coat to dry before applying top coat (minimum 6 hours at 20°C/50% r.h.)

Curing Times (at 20°C/50% r.h.):

- Rain resistant: 10 minutes
- Touch dry: 3 hours
- Recoat: 6 hours minimum
- Full cure: 7 days

Limitations:

- Not suitable for permanent water immersion
- Do not use for indoor applications
- Do not apply on substrates with rising moisture
- Must be overcoated with UV-resistant top coat for exposed applications

HEALTH AND SAFETY

Polyurethane resin may cause skin and eye sensitization and irritation. If eye contact occurs, rinse immediately with plenty of water for 15-20 minutes and seek medical attention. For skin contact, wash immediately with soap and water; remove contaminated clothing. If swallowed, do not induce vomiting; rinse mouth and drink water, then seek medical attention. Use gloves (nitrile), safety glasses, and protective clothing during handling. Ensure adequate ventilation – use respiratory protection with organic vapor cartridges if ventilation is poor. Refer to the Safety Data Sheet for detailed information.

CLEAING OF TOOLS

Clean all brushes, rollers, mixing equipment, and spillages with xylene, acetone, or polyurethane thinner immediately after use before material cures. Dried material requires mechanical removal. Dispose of cleaning materials in accordance with local regulations.

APPROVALS AND STANDARDS

Chemfit Lastic 601-BC complies with the following standards:

- **ETAG 005** – Liquid applied roof waterproofing kits (Part 1 and Part 8 where applicable)
- **EN 13501-1** – Reaction to fire: Euroclass E
- **EN 13501-5** – External fire performance: BROOF (t1), BROOF (t2), BROOF (t3), BROOF (t4)
- **EN ISO 527-3** – Tensile strength and elongation testing
- **EN ISO 6383-1** – Tear strength testing
- **EN 1931 Method B** – Water vapour permeability testing
- **FLL** – Root resistance approved
- **ISO 9001** – Quality management system certified

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