

# CHEMFIT LATEX

**High Performance, Water Resistant Bonding Agent and Mortar Improver; For Repair, Inject, Render, Coat, Waterproof Concrete/Masonry & Bond New Concrete to Old**

## PRODUCT DESCRIPTION

**ChemFit Latex** is a high-performance, water resistant bonding agent and mortar improver based on a synthetic latex polymer. It is added to cementitious mixes to significantly enhance adhesion, water resistance, flexural strength, and durability. The advanced formulation provides excellent bonding for new-to-old concrete applications and ensures long-lasting performance in damp or wet environments. This versatile additive is ideal for site-mixed repair mortars, renders, coatings, waterproofing systems, and injection grouts.

## PRIMARY APPLICATIONS

**ChemFit Latex** is recommended for use in conditions such as:

- Repair and rehabilitation of deteriorated concrete and masonry
- Injecting into cracks and voids in concrete structures
- Renders and waterproof renders for walls and facades
- Protective coatings for concrete and masonry surfaces
- Waterproofing systems for below-grade and wet areas
- Bond new concrete to old concrete (overlays, patches, toppings)
- Thin layer patching mortars
- Floor screeds and cementitious toppings
- Tile fixing mortars (ceramic, porcelain, stone)

## KEY FEATURES AND BENEFITS

- **High performance** – Superior adhesion, flexibility, and durability
- **Water resistant** – Suitable for damp and wet environments; protects against moisture ingress
- **Excellent adhesion** – Bonds strongly to concrete, masonry, brick, blockwork, stone, and tiles
- **Conforms to ASTM C1042 Type II** – Meets international standards for latex bonding agents
- **Reduces shrinkage and cracking** – Improves long-term dimensional stability
- **Increases flexural strength** – Produces tougher, more durable mortars
- **Enhances workability** – Improves cohesion and spreadability of cement mixes
- **Chloride free** – Safe for use with reinforced concrete and steel
- **Ready to use** – Simple liquid additive; mix with water and cement
- **Versatile** – Suitable for repair, injection, rendering, coating, waterproofing, and bonding applications

## PHYSICAL AND CHEMICAL PROPERTIES

Property	Specification
Appearance	Liquid
Color	Milky white / Off-white
Form	Ready-to-use liquid
Basis	Synthetic latex polymer (acrylic or SBR based)
Specific Gravity	1.01 – 1.05 at 25°C
pH Value	7.0 – 9.0
Chloride Content	Nil
VOC Content	Low
Freezing Point	0°C (protect from freezing)
Application Temperature	+5°C to +50°C

## PACKAGING AND STORAGE

### Packaging:

- 25 L pails
- 200 L drums

### Storage:

- Store in original sealed containers at +5°C to +35°C
- Protect from direct sunlight, frost, and extreme heat
- Keep container tightly closed when not in use
- If frozen, thaw completely and agitate before use

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

## DOSAGE AND COVERAGE RATES

### As a Bonding Slurry:

- **Mix Ratio (by volume)** – ChemFit Latex : Water = 1 : 1. Mix with cement and fine sand to a brushable consistency.
- **Coverage** – Approximately 4 – 6 m<sup>2</sup> per liter of mixed slurry, depending on substrate porosity.

### As a Mortar Admixture:

- **For Renders, Screeds & Repair Mortars** – Add ChemFit Latex to mix water. Typical dosage: 5 – 15 liters per 50 kg bag of cement.
- **For Waterproofing & High Strength** – Use ChemFit Latex neat (without water dilution) as the gauging liquid.
- **For Injection Grouts** – Use ChemFit Latex diluted 1:1 to 1:3 with water depending on viscosity requirements.

### Typical Mix Proportions (by volume):

Application	ChemFit Latex	Water	Cement	Sand
Bonding Slurry	1	1	2	2
Render / Screed	0.5	0.5	1	2-3
Repair Mortar	1	0	1	2
Waterproof Coating	1	0.5	1	1.5

**NOTE: Dosage and coverage are approximate. Always conduct trial mixes to determine optimal proportions for specific site conditions.**

## APPLICATION GUIDELINES

### Surface Preparation:

- Substrate must be clean, sound, and free from dust, oil, grease, laitance, curing compounds, loose particles, and any contaminants
- Concrete/masonry: mechanically abrade (grinding, wire brushing, scabbling, shot blasting) to achieve open texture
- Remove all unsound or deteriorated concrete
- Pre-soak absorbent substrates with clean water to achieve saturated surface dry (SSD) condition; remove any standing water before application

### Mixing:

- For bonding slurry: mix **ChemFit Latex**, water, cement, and sand to a brushable consistency
- For mortar admixture: dilute **ChemFit Latex** with water (typically 1:1) or use neat as required
- Mix with low-speed drill and mixing paddle (400-600 rpm) for 2-3 minutes until uniform, lump-free consistency
- Do not add excess water beyond recommended ratio

### Application:

- Apply bonding slurry by brush or stiff broom onto prepared surface
- For bonding new concrete to old, apply slurry and place new concrete while slurry is still tacky (within 30-60 minutes)
- For repair mortars, renders, and screeds, apply by steel trowel and finish as required
- For injection applications, use suitable injection equipment and techniques
- For waterproof coatings, apply in two coats with minimum 4-6 hours between coats
- For vertical and overhead applications, use stiffer consistency to prevent sagging
- Do not apply thicker than 15-20 mm per layer; use multiple layers for deeper repairs

### Curing:

- Protect from rapid moisture loss, direct sunlight, wind, and extreme temperatures
- For **ChemFit Latex** modified mixes, standard water curing is not required; the polymer film provides self-curing properties
- In hot climates, apply curing compound or cover with plastic sheeting to prevent premature drying
- For critical applications, maintain protection for minimum 3 days
- Do not apply below +5°C or when temperatures expected to drop below +5°C within 24 hours

## HEALTH AND SAFETY

**ChemFit Latex** 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 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.

## CLEAIING OF TOOLS

Clean all mixing equipment, brushes, trowels, and spillages with water immediately after use. Dried material may require mechanical removal. Dispose of cleaning materials in accordance with local regulations.

## APPROVALS AND STANDARDS

**ChemFit Latex** conforms to the following standards:

- **ASTM C1042 / C1042M** – Type II (Standard Specification for Bond Strength of Latex-Based Repair Materials to Concrete)
- **ASTM C1059 / C1059M** – Type II (Standard Specification for Latex Agents for Bonding Fresh to Hardened Concrete)
- High performance, water resistant bonding agent and mortar improver
- Suitable for repair, injection, rendering, coating, waterproofing concrete/masonry, and bonding new concrete to old

## 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.*

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