

CHEMFIT AC500 ROOFGUARD

Acrylic Waterproof Coating – For Roofs & Non-Traffic Areas

PRODUCT DESCRIPTION

ChemFit AC500 RoofGuard is a premium, single-component, water-based acrylic waterproof coating designed for protecting roofs and other non-traffic exposed surfaces. It cures to form a seamless, flexible, and durable membrane that provides excellent weather resistance and UV protection. The formulation adheres well to a variety of substrates, creating a "breathable" film that allows trapped moisture vapor to escape while blocking liquid water ingress.

PRIMARY APPLICATIONS

ChemFit AC500 RoofGuard is recommended for use in conditions such as:

- Waterproofing of concrete roofs, asbestos cement sheets, and metal roofing
- Restoration of aged or weathered roof surfaces
- Sealing of roof joints, flashings, and penetrations (when used with reinforcement fabric)

KEY FEATURES AND BENEFITS

- **Single component** – Ready to use; no on-site mixing required.
- **Water-based** – Low odor, environmentally friendly, and easy clean-up.
- **Elastic & flexible** – Bridges hairline cracks to maintain integrity under thermal movement.
- **UV resistant** – Resists degradation from prolonged sun exposure.
- **Breathable** – Prevents blistering by allowing water vapor to escape.
- **Good adhesion** – Bonds to concrete, metal, and many existing roof surfaces.

MECHANICAL PROPERTIES

Property	Value
Tensile Strength	> 1.5 MPa (approx. 220 psi)
Elongation at Break	> 300%
Crack Bridging	> 1.0 mm (depending on film thickness)
Water Permeability	< 0.5 mL/hour (Class III)
Low Temperature Flexibility	Pass (-10°C)

PHYSICAL AND CHEMICAL PROPERTIES

Property	Specification
Appearance	Viscous liquid
Colour	White (custom colours available)
Basis	100% Acrylic Emulsion / Elastomer
Solids Content	55 – 65% (by weight)
Density	1.3 – 1.4 kg/L
VOC Content	Low (<50 g/L)
Touch Dry Time (25°C)	2 – 4 hours
Recoat Time (25°C)	6 – 24 hours
Full Cure	7 days
Application Temperature	+5°C to +35°C

PACKAGING AND STORAGE

Packaging:

- 20 kg plastic pail

Storage:

- Store in original sealed containers at +10°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:** 1.2 – 1.6 kg/m² per coat (for approx. 0.8 – 1.0 mm wet film thickness).
- **Yield per 20 kg pail:** Approximately 12 – 16 m² per coat.

Recommendation: A minimum of 2 coats is recommended for proper waterproofing. Apply at right angles to each other.

APPLICATION GUIDELINES

Surface Preparation:

- Substrate must be clean, dry, sound, and free from dust, oil, grease, laitance, and loose particles.
- Mechanically abrade smooth surfaces to ensure profile.
- Fill active leaks/cracks with a suitable repair mortar or plugging compound prior to application.

Mixing:

- Stir thoroughly before use to ensure uniform consistency.
- Do not thin or dilute; add water only if recommended on the product label.

Application:

- Apply by brush, roller (synthetic nap), or airless spray.
- For joints or cracks, embed polyester or fiberglass fabric into the first coat for reinforcement.
- Apply the second coat once the first is completely dry and firm.

Curing:

- Protect from rain and heavy dew for at least 24 hours.
- Avoid foot traffic during the curing process.

HEALTH AND SAFETY

Acrylic coating may cause mild eye and skin irritation. If eye contact occurs, rinse with water for 15 minutes. For skin contact, wash with soap and water. If swallowed, do not induce vomiting; rinse mouth and drink water. Use gloves, safety glasses, and protective clothing. Ensure adequate ventilation. Refer to SDS.

CLEANG OF TOOLS

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

APPROVALS AND STANDARDS

- Conforms to ASTM D6083 (Standard Specification for Liquid Applied Acrylic Coating Used in Roofing).
- Low VOC compliant.

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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