

CHEMFIT CHEMFLOOR 1800

Two Part Self-Smoothing Epoxy Coating, Highly Chemically and Mechanically Resistant – For Bund Areas, Protection Against Water Contaminating Liquids

PRODUCT DESCRIPTION

ChemFit ChemFloor 1800 is a two part, solvent-free, high-build, self-smoothing epoxy coating specifically formulated to withstand highly aggressive chemical environments. The 100% solids system cures to form an impervious, seamless, and hard-wearing surface, providing outstanding protection against a wide range of water contaminating liquids, solvents, and industrial chemicals. It is ideal for constructing liquid-tight bunds, secondary containment areas, and chemical storage facilities, ensuring environmental compliance and asset protection.

PRIMARY APPLICATIONS

ChemFit ChemFloor 1800 is recommended for use in conditions such as:

- High resistance secondary containment bunds (e.g., oil, diesel, chemical storage tanks)
- Protection against water contaminating liquids and hazardous substances
- Chemical storage areas, tank farms, and process areas
- Concrete sumps, spill containment areas, and drip trays
- Heavy-duty industrial floors with high chemical exposure

KEY FEATURES AND BENEFITS

- **Solvent Free** – 100% solids; safe for use in confined spaces; zero shrinkage
- **Self-Smoothing** – Provides a seamless, high-gloss, liquid-tight finish
- **High Chemical Resistance** – Excellent protection against mineral oils, fuels (diesel/petrol), dilute acids/alkalis, salts, and solvents [citation:1]
- **Impermeable** – Forms an effective barrier against aggressive water contaminating liquids, preventing ground pollution
- **High Mechanical Strength** – High compressive strength and abrasion resistance for heavy traffic

DOSAGE AND COVERAGE RATE

- **Self-Smoothing (Standard Application):** Approx. 1.5 – 1.8 kg/m² (achieves approx. 1.0 – 1.2 mm DFT)
- **Yield per 25 kg pack:** Approx. 14 – 16 m² per coat

NOTE: A minimum system thickness of 1.0 – 1.5 mm is recommended for high chemical resistance. Two coats may be required for pinhole-free integrity.

PHYSICAL AND CHEMICAL PROPERTIES

Property	Specification
Appearance	Part A: Pigmented liquid; Part B: Clear liquid
Colour	Range of RAL colours (e.g. RAL 7032, RAL 3009)
Basis	Two-part, solvent-free epoxy resin
Mix Ratio (by weight)	Refer to product label
Density (mixed)	~1.4 – 1.6 kg/L
Solids Content	100% (Solvent Free)
Pot Life (at +20°C)	20 – 30 minutes
Touch Dry (at +20°C)	~12 hours
Full Cure	7 days
Application Temperature	+10°C to +30°C

PACKAGING AND STORAGE

Packaging:

- 25 kg pack (pre-weighed Part A + Part B ready-to-mix unit)

Storage:

- Store in original sealed containers at +10°C to +25°C
- Protect from direct sunlight, moisture, and freezing
- Store in dry conditions
- Keep containers tightly sealed when not in use

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

APPLICATION GUIDELINES

Surface Preparation:

- Substrate must be sound, clean, dry, and free from dust, oil, grease, laitance, and loose particles
- Mechanically abrade (shot blasting or grinding) to achieve CSP 2-3 open texture
- Substrate moisture content must be < 4%
- Fill blowholes and repair damaged areas with suitable epoxy filler

Priming:

- Apply a compatible solvent-free epoxy primer (e.g., **ChemFit EpoxyPrime 1400**) at 0.3 – 0.5 kg/m²
- Allow primer to cure (approx. 10-12 hours) before applying **ChemFloor 1800**

Mixing & Application:

- Pre-mix Part A; add Part B according to label ratio
- Mix with low-speed drill (300-400 rpm) for 2-3 minutes
- Pour onto primed substrate; spread using a serrated trowel or squeegee
- Immediately roll with a spiked roller to remove air bubbles and aid leveling

Curing:

- Light foot traffic: ~24 hours at +20°C
- Full chemical resistance: 7 days
- Protect from dust, moisture, and water during cure
- Do not apply below +10°C or if relative humidity exceeds 80%

HEALTH AND SAFETY

Epoxy resins may cause skin and eye sensitization. If eye contact occurs, rinse with water for 15-20 minutes, seek medical attention. Skin contact: wash with soap and water. Use nitrile gloves, safety glasses, protective clothing. Ensure ventilation – use respiratory protection if ventilation is poor. Refer to SDS.

CLEANG OF TOOLS

Clean tools and equipment with xylene, acetone, or epoxy thinner immediately after use.

APPROVALS AND STANDARDS

ChemFit ChemFloor 1800 complies with the following standards:

- **EN 1504-2** – Surface protection systems for concrete (Coating)
- **EN 13813** – Screed material and floor coatings
- **ISO 9001** – Quality management system certified
- **Leachate Resistance** – Proven resistance to aggressive water contaminating liquids
- Two part self-smoothing epoxy coating, highly chemically and mechanically resistant
- **Low VOC** – Suitable for enclosed spaces
- Two-part PU tough-elastic colored seal coat

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