

CHEMFIT RC200

Self-Leveling Epoxy – For Industrial Floors

PRODUCT DESCRIPTION

ChemFit RC200 is a two-component, solvent-free, self-leveling epoxy resin coating designed to provide a seamless, high-gloss, and durable floor finish. Applied at thicknesses from 1 to 3 mm, it creates a hard-wearing, dust-proof, and easy-to-clean surface suitable for medium to heavy industrial environment. The formulation offers excellent flow and leveling properties, conforming to undulating substrates without the need for complex troweling.

PRIMARY APPLICATIONS

ChemFit RC200 is recommended for use in conditions such as:

- **Industrial floors:** Warehouses, factories, and manufacturing plants subjected to forklift and trolley traffic.
- **Commercial spaces:** Showrooms, workshops, and loading bays.
- **Specialist areas:** Laboratories, clean rooms, pharmaceutical, and electronic assembly facilities.
- **Parking & transport:** Car park decks and aircraft hangars.

KEY FEATURES AND BENEFITS

- **Self-leveling:** Creates a perfectly flat, smooth surface with minimal effort.
- **Solvent-free:** Low odor, safe for indoor application, and environmentally friendly.
- **High mechanical strength:** Excellent impact, abrasion, and compression resistance (Shore D > 75).
- **Chemical resistance:** Withstands oils, fuels, and mild industrial chemicals.
- **Seamless & hygienic:** Eliminates joints where dirt and bacteria can accumulate.
- **Single coat system:** Achieves desired thickness (1–3 mm) in one application.

MECHANICAL PROPERTIES

Property	Value
Compressive Strength	> 85 N/mm ²
Flexural Strength	> 30 N/mm ²
Tensile Strength	> 20 N/mm ²
Bond Strength (to concrete)	> 1.5 N/mm ² (Concrete failure)
Shore Hardness (Type D)	75 – 85
Abrasion Resistance (Taber)	< 100 mg (CS-17 wheel)

PHYSICAL AND CHEMICAL PROPERTIES

Property	Specification
Appearance / Color	Liquid (Part A + B); Available in standard RAL colors
Finish	High Gloss
Basis	Solvent-free epoxy resin
Volume Solids	~100%
Density (Mixed)	1.50 – 1.60 g/cm ³
Mix Ratio	Refer to product label (manufacturer specific)
Pot Life (@ 25°C)	20 – 40 minutes
Recoating Time	24 – 48 hours (max)
Full Cure	7 days
Application Temp.	+10°C to +30°C (Min +5°C)
Substrate Moisture	< 4%

PACKAGING AND STORAGE

Packaging:

- 25 kg kit (Part A + Part B + optional filler/aggregate).

Storage:

- Store in original, unopened containers in a cool, dry area between +10°C and +30°C.
- Protect from direct sunlight and moisture.

Shelf life: 12 months from date of manufacture.

DOSAGE AND COVERAGE RATES

Thickness	Approx. Consumption	Yield per 25 kg kit
1 mm	1.4 – 1.7 kg/m ²	~ 14 – 17 m ²
2 mm	2.8 – 3.4 kg/m ²	~ 7 – 9 m ²
3 mm	4.2 – 5.1 kg/m ²	~ 5 – 6 m ²

Note: Values are theoretical for sealed/smooth substrates. Rough concrete will require more material. Filling the resin with quartz sand (e.g., up to 1:1 ratio) reduces pure resin consumption for higher thicknesses.

APPLICATION GUIDELINES

Surface Preparation:

- Substrate must be dry, sound, and free of dust, oil, laitance, and coatings.
- Mechanically prepare via shot blasting or grinding to achieve an open texture (CSP 2-3).
- Apply a compatible epoxy primer (e.g., ChemFit EP Primer) to seal the substrate and improve adhesion.

Mixing:

- Pre-mix Part A (Resin) to ensure uniform consistency.
- Add Part B (Hardener) and mix with a low-speed drill (300-500 rpm) for 2-3 minutes until homogeneous.
- *If using a filler (sand):* Add the graded quartz sand to the mixture after combining A+B and mix thoroughly.

Application:

- Pour the mixed material onto the primed area and spread immediately using a serrated trowel, pin rake, or notched squeegee to control the thickness (1-3 mm).
- Immediately roll the applied coating with a **spiked roller** (de-airing roller) in a criss-cross pattern to remove entrapped air bubbles and ensure proper consolidation.

Curing:

- Protect from dust, moisture, and direct drafts during curing.
- **Foot traffic:** 24 hours.
- **Light wheeled traffic (pallet jacks):** 3 days.
- **Full chemical resistance / Heavy forklift traffic:** 7 days.
- Do not apply below +10°C or if the relative humidity is above 85%.

HEALTH AND SAFETY

Epoxy resins may cause skin and eye sensitization. Use nitrile gloves, chemical goggles, and protective clothing. Ensure adequate ventilation during mixing and application. In case of contact, wash immediately with soap and water; flush eyes with water for 15 minutes and seek medical advice if irritation persists. Refer to the Safety Data Sheet (SDS) for detailed information.

CLEAING OF TOOLS

Clean all tools (trowels, rollers, mixing equipment) immediately after use with xylene, acetone, or epoxy thinner. Cured epoxy requires mechanical removal.

APPROVALS AND STANDARDS

ChemFit RC200 conforms to the following standards:

- **ASTM D4060** – Abrasion Resistance (Taber Abraser)
- **ASTM D4541** – Pull-Off Adhesion Strength
- **ASTM D638** – Tensile Properties
- **ASTM C579** – Compressive Strength
- **EN 13813** – Screed material and floor coatings.
- **EN 1504-2** – Surface protection systems for concrete (optional for chemical plants).

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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