

CHEMFIT PU FLOOR 358

2-Part Tough-Flexible Colored Epoxy Seal Coat – For Abrasion Resistant Flexible Seal Coat for Industrial Floors, Car Park Decks, Ramps & Warehouses

PRODUCT DESCRIPTION

ChemFit PU Floor 358 is a two-part, tough-flexible colored epoxy seal coat specifically formulated as an abrasion resistant flexible seal coat for demanding industrial environments. This advanced epoxy system provides an optimal balance of toughness and flexibility, offering superior protection against mechanical wear while accommodating minor substrate movement. The formulation provides excellent resistance to impact, abrasion, chemicals, and thermal shock. The colored finish provides an attractive, seamless, and easy-to-clean surface suitable for industrial floors, car park decks, ramps, and warehouses.

PRIMARY APPLICATIONS

ChemFit PU Floor 358 is recommended for use in conditions such as:

- Abrasion resistant flexible seal coat for industrial floors, warehouses, and factories
- Protective coating for car park decks, parking garages, and loading ramps
- Flexible top coat for areas requiring crack bridging and impact resistance
- Seal coat over broadcast systems and epoxy mortars
- Renovation of existing failing epoxy or PU flooring systems
- Areas requiring anti-slip properties (R11-R12) with aggregate broadcast

KEY FEATURES AND BENEFITS

- **Two-part epoxy system** – High mechanical strength and chemical resistance
- **Tough-flexible formulation** – Optimal balance of hardness and flexibility; superior impact and abrasion resistance
- **Excellent abrasion resistance** – Withstands heavy forklift and vehicle traffic
- **Chemical resistant** – Resists oils, fuels, de-icing salts, and industrial chemicals
- **Seamless and easy to clean** – Non-porous, hygienic surface
- **Good adhesion** – Bonds strongly to properly prepared concrete and cementitious substrates
- **Slip resistant** – Can achieve R11-R12 classification with aggregate broadcast
- **Conforms to EN 13501-1** – Certified fire performance classification
- **UV stable** – Formulated to resist yellowing; suitable for exposed areas
- **Available in 32.5 kg unit** – Efficient for medium to large projects

MECHANICAL PROPERTIES

Property	Value
Shore D Hardness	65 – 75
Tensile Strength	> 10 N/mm ²
Elongation at Break	15 – 30% (tough-flexible)
Adhesion to Concrete	> 1.5 N/mm ² (substrate failure typical)
Abrasion Resistance	Excellent for heavy traffic
Impact Resistance	Good (less brittle than standard epoxy)
Crack Bridging	Moderate (accommodates minor substrate movement)

PHYSICAL AND CHEMICAL PROPERTIES

Property	Specification
Appearance	Part A: Pigmented liquid; Part B: Clear/Amber liquid
Color	Range of RAL colors available (standard: RAL 7032, RAL 7037, RAL 9005)
Basis	Two-part, solvent-free modified epoxy resin (epoxy-PU hybrid)
Mix Ratio (by weight)	Refer to product label (32.5 kg unit: Part A + Part B)
Density (mixed)	~1.4 – 1.6 kg/L
Solids Content	~100% (by weight and volume)
Pot Life (at +20°C)	25 – 35 minutes
Touch Dry (at +20°C)	6 – 10 hours
Light Foot Traffic	18 – 24 hours
Light Vehicle Traffic	48 – 72 hours
Full Chemical Cure	7 days
Application Temperature	+10°C to +30°C
Substrate Temperature	Must be ≥3°C above dew point
Relative Humidity	Max. 80%
Substrate Moisture	< 4% (no rising moisture)

ANTI-SLIP CLASSIFICATION

With Aggregate Addition	Classification	Slip Angle
No aggregate (smooth finish)	R9	6° – 10°
Fine aggregate broadcast	R10 – R11	10° – 27°
Medium aggregate broadcast	R11 – R12	19° – 35°

PACKAGING AND STORAGE

Packaging:

- 32.5 kg unit (pre-weighed Part A + Part B)

Storage:

- Store in original sealed containers at +10°C to +25°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 RATE

Application Type	Mix Ratio (Base : Additive)	Consumption (approx.)	Coverage per 32.5 kg unit
Seal coat (smooth, neat)	Neat (1:0)	0.30 – 0.40 kg/m ²	80 – 108 m ²
R10 anti-slip (fine aggregate)	Neat + fine aggregate	0.40 – 0.60 kg/m ²	54 – 81 m ²
R11-R12 anti-slip (medium aggregate)	Neat + medium aggregate	0.60 – 0.90 kg/m ²	36 – 54 m ²

NOTE: Coverage is approximate; varies with substrate porosity, surface profile, and application method. Anti-slip aggregate addition rate: approx. 1.5 – 3.0 kg per 30 kg of resin (or as required to achieve desired slip resistance).

APPLICATION GUIDELINES

Surface Preparation:

- Substrate must be sound, clean, dry, and free from dust, oil, grease, laitance, curing compounds, and loose particles
- Mechanically abrade (shot blasting or grinding) to achieve open texture (CSP 2-3)
- Substrate moisture content must be < 4% with no rising moisture
- Fill blowholes and repair damaged areas with suitable filler

Priming:

- For porous or dusty substrates, apply compatible epoxy primer (e.g., **ChemFit EpoxyPrime 1400**) at 0.30 – 0.50 kg/m²
- For epoxy mortar or broadcast base coats, primer may not be required if base coat is properly cured
- Allow primer to cure completely before applying top coat

Mixing:

- Thoroughly pre-mix Part A before combining
- Add Part B to Part A according to label ratio
- Mix with low-speed drill (300-400 rpm) for 2-3 minutes until uniform
- Pour into another container and mix again for 1 minute to ensure thorough blending
- Use within pot life (25-35 minutes at +20°C)

Application:

- **Smooth seal coat:** Pour material onto prepared and primed substrate; spread using short-pile roller or squeegee; back-roll crosswise for uniform coverage
- **Anti-slip seal coat:** Apply as above; immediately broadcast clean, dry, graded anti-slip aggregate (0.4 – 0.7 mm or 0.7 – 1.2 mm) to excess while wet; allow to cure overnight; vacuum loose aggregate; apply second seal coat if required for complete coverage
- Maintain wet edge to avoid lap marks; work in manageable sections

Curing Times:

Temperature	Recoat Minimum	Recoat Maximum	Pot Life
+10°C	20-24 hours	48 hours	~35 min
+20°C	12-16 hours	24-36 hours	~25 min
+30°C	8-10 hours	20-24 hours	~15 min

- Light foot traffic: 18-24 hours at +20°C
- Light vehicle traffic: 48-72 hours at +20°C
- Full chemical and mechanical resistance: 7 days
- Do not apply below +10°C or if relative humidity exceeds 80%
- Do not apply if substrate temperature is below dew point (+3°C margin)

HEALTH AND SAFETY

Epoxy resins 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 epoxy 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 PU Floor 358 complies with the following standards:

- **EN 13501-1** – Fire classification of construction products and building elements
- **DIN 51130** – Anti-slip classification (R11-R12 achievable with aggregate addition)
- **EN 1504-2** – Surface protection systems for concrete (Coating)
- **EN 13813** – Screed material and floor coatings
- **ASTM D4541 / EN 1542** – Pull-off adhesion strength testing
- **ASTM D4060** – Abrasion resistance testing (Taber Abraser)
- **DIN 53505** – Shore hardness testing
- **ISO 9001** – Quality management system certified
- Two-part, tough-flexible colored epoxy seal coat
- Suitable for abrasion resistant flexible seal coat for industrial floors, car park decks, ramps, and warehouses

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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