

PRODUCT DEFINITION

EPO FLOOR CT is a solvent free system based on epoxy resins and curing agents specially selected for their ability to withstand chemical attack. The system consists of pre-weighed base & hardener components pack, all of which contain reactive elements that are essential to the installation of the system.

A slip resistant texture can be provided by the use of one of a range of **EPO Agg 38/42** product. Anti-slip Grains which have been carefully graded to ensure an even texture.

ADVANTAGES

- Durable, economic and low maintenance costs.
- Proven against a wide range of industrial chemicals.
- Solvent free - no odour during application.
- Slip resistant - different textures available to suit conditions to avoid slipping.
- Liquid applied providing complete protection.
- Available in a wide range of colours to improve the working environment and identify slip hazard areas.
- Specially formulated for use in Middle East conditions.

AREAS OF USE

EPO FLOOR CT provides a hard wearing, chemical and abrasion resistant floor finish. It is ideally suited for use in wet areas where a high degree of resistance to chemicals, oils and grease is required such as:

- Dairies and hospitals
- Soft drinks production facilities
- Chemical manufacturing plants
- Car parks and workshops

PRODUCT DATA

Form	Liquid
Colour	Variable according to the demand
Packing	24 Kg Set (A+B)
Consumption	0.350 Kg/m ² /coat for 200 micron thickness (recommended two coat application)
Storage	12 Months without opening and 6 with frost protection

TECHNICAL SPECIFICATION

Test Name	Standard	Average Result
Pot Life @ 25°C	-	60 ± 20 min
Solid Content	AST M D 2369	100 %
Density	ASTM D 1475	1.80 ± 0.1 g/cm ³
Tensile Strength	ASTM C 307	> 4.0 N/mm ²
Durometer Hardness	ASTM D 2240	> 70
Water Absorption	ASTM D 570	< 0.03 %
Bond Strength with concrete	ASTM C 882	> 3.0 N/mm ²
Compressive Strength @10 days	ASTM C 579	> 60 N/mm ²
Flexural Strength @ 10 days	ASTM C 580	> 6.0 N/mm ²
Softening Point	ASTM D 3104	> 80°C
Skid Resistance Test value of each specimens (dry) ----- Test value of each specimens (wet)	ASTM E 303	> 72 ----- > 33
Abrasion Resistance	ASTM D 4060	< 1%
Linear Shrinkage	ASTM D 2566	< 0.01 %
Viscosity @ 25°C (Brookfield Viscometer)	ASTM D 2196	> 1400cps
Resistance to Chemical Distilled water (cold) Distilled water (hot) Ethyl alcoholic (50%Vol) Vinegar (3% Acetic acid) Alkali Solution Acid Solution Soap Solution Detergent Solution Acetone Vegetable oil , Ketchup Coffee, Tea	ASTM D 1308	Resistant

INSTRUCTION FOR USE

SURFACE PREPARATION

The surfaces of application should be clean and dust free. The surface should be rough and prepared based on the epoxy coating system. The defects on the surface should be leveled using epoxy repairing mortar.

New concrete floors

These should normally have been placed for at least 28 days and have a moisture content of less than 5%. Floors should be sound and free from contamination such as oil and grease, mortar and paint splashes or curing compound residues. Excess laitance deposits are best removed by light mechanical scabbling, grinding or grit/captive blasting followed by vacuum cleaning to remove dust debris.

Old concrete floors

A sound, clean substrate is essential to achieve maximum adhesion. As for new concrete floors dry removal of laitance deposits are best removed by light mechanical scabbling, grinding or grit/captive blasting. Oil and grease penetration should be removed by the use of a proprietary chemical degreaser or by hot compressed air treatment. Any damaged areas or surface irregularities should be repaired using one of the **EPO BOND FD** ranges of products.

PRIMER APPLICATION

Primer is normally recommended. The substrate should be primed with **EPOFLOOR PR** 0.150Kg to 0.250Kg/m² depends upon substrate surface and quality. Contact **EPO GULF** Technical department for advice.

MIXING AND COATING

The base and hardener components of **EPO FLOOR CT** should be thoroughly stirred before the two are mixed together. The entire contents of the hardener container should be poured into the base container and the two materials mixed thoroughly for at least 3 minutes. The use of a heavy-duty slow speed, flameproof or air driven drill fitted with a suitable Mixing Paddle. Mix these components in the quantities supplied taking care to ensure all containers is scraped and clean.

Note: Recommended **EPO SOLVENT** as thinner can be added up to 5% to get desired consistency, consult **EPO GULF TECHNICAL DEPARTMENT** for more details

STANDARD APPLICATION

Two coat applications is recommended, the first coat of **EPO FLOOR CT** should be applied using a good quality medium haired pile roller, suitable for epoxy application, or squeegee to achieve a continuous coating. Ensure that loose hairs on the roller are removed before use. A minimum film thickness of 200 microns should be applied.

This can be increased where specifications demand. When the base coat has reached initial cure (10 hours @ 25°C or 6 hours at 35°C). The top coat can be applied by medium haired roller, at minimum film thickness of 200 microns. Care should be taken to ensure that a continuous film is achieved.

ANTISLIP APPLICATION

If a slip resistant texture is required, the base coat shall be applied as per the standard application, but at a minimum film thickness of 200 microns. The base coat should then be dressed with the chosen **EPO Agg 38/42** This should be done as soon as possible after laying. The recommended procedure is to completely blind the base coat i.e. apply excess dressing aggregate to completely obliterate the base coating alternatively, the **EPO Agg 38/42** Grains can be broadcast in a light random dressing to provide a less dense finish. When the base coat has reached initial cure (10 hours @ 25°C or 6 hours at 35°C), the excess aggregate should be vacuum cleaned from the surface. The top coat can now be applied by medium haired roller, at a rate of approx. 0.350 Kg/ m². Care should be taken to ensure that a continuous film is achieved and the rough surface, caused by the aggregate, is completely sealed. This top coat must be applied within 36 hours @ 25°C (18 hours @ 35°C) of the application of the first coat.

EXPANSION JOINTS

Expansion joints in the existing substrate must be retained and continued through the **EPO FLOOR CT** topping. Use recommended joint sealants specifically designed for flooring, contact **EPO GULF** Technical department for advice. Cleaning Tools and equipment should be cleaned with **EPO SOLVENT** immediately after use. Spillages should be absorbed with sand or sawdust and disposed of in accordance with local regulations.

LIMITATIONS

EPO FLOOR CT should not be applied on to surfaces known to, or likely to suffer from, rising dampness, potential osmosis problems or have a relative humidity greater than 75% as measured in accordance with BS 8203 Appendix A or by a protimeter thermo hygrometer.

EPO GULF does not recommend acid etching as a method of floor preparation if used; the method should be approved by project consultant.

In common with all epoxy materials, some slight shade changes may be experience over the long term when placed in adverse exposure conditions. Any such change in shade is not regarded as being detrimental to performance.

PACKAGING

EPO FLOOR PR	24 Kg packs
EPO FLOOR CT	24 Kg packs
EPO Agg 38/42	24 Kg packs
EPO SOLVENT	5 Ltr packs

COVERAGE

EPO FLOOR PR	0.150 - 0.250 Kg/m ² /coat
EPO FLOOR CT	0.340 - 0.360 Kg/m ² /coat
EPO Agg 38/42	0.750 Kg – 1.000 Kg/m ²

Note: Coverage figures given are theoretical - due to wastage factors and the variety and nature of substrates, practical coverage figures may be reduced, this will vary with site and application conditions.

STORAGE

STORAGE CONDITIONS

Store under warehouse conditions, Cover out of direct sunlight on dry place, Keep it away from all sources of heat.

CLEANING AND DISPOSAL

Spillage of component products should be absorbed on to earth, sand or other inert material and transferred to a suitable vessel. Disposal of such spillage or empty packing should be in accordance with local waste disposal regulations.

PRECAUTIONS

HEALTH AND SAFETY

EPO FLOOR CT and **EPO FLOOR PR** should not come in contact with skin and eyes or be swallowed. Avoid prolonged inhalation of solvent vapors.

Some people are sensitive to epoxy resins, hardeners and solvents, gloves, goggles and a barrier cream should be used. Ensure adequate ventilation and if working in enclosed areas use suitable breathing apparatus.

If mixed resin comes in contact with the skin, it must be removed before it hardens with a resin removing cream followed by washing with soap.

Should accidental eye contamination occur, wash well with plenty of clean water and seek medical advice. If swallowed seek medical attention immediately. Do not induce vomiting.

