

CHEM-FLOOR SL EP

HEAVY DUTY, SELF-LEVELING EPOXY FLOOR TOPPING

DESCRIPTION:

CHEM-FLOOR SL EP is a specially selected solvent free epoxy system for new and old concrete floor to provide a hard wearing. Chemical resistant, impervious and easy to clean floor topping.

CHEM-FLOOR SL EP is a unique blend of polymer resins and special aggregate designed to level pitted, and worn concrete floor quickly and easily. It has excellent chemical resistance and is flexible to withstand impact while remaining sufficiently strong to stand upon industrial traffic. 100% reactive system totally free of solvents.

FEATURES/BENEFITS:

- Flowable consistency for self leveling application.
- Solvent free formulations low odor during application.
- Bonds tenaciously becomes an integral part of the floor.
- Easy application and easy to maintain.
- Excellent chemical resistance.
- Cures to dense, impervious seam-free continuous surface.
- Excellent durability and impact resistance.
- Available in a wide range of colors.

TYPICAL APPLICATION:

- Pharmaceutical industries
- Chemical plants
- Manufacturing plants
- Warehouses
- Showrooms
- Auto/truck repair bays
- Laboratories
- Hospitals

STANDARD COLOURS:

White, Light Reflective, Tile Red, Tan, Brown, Concrete Grey, Battleship Gray, Black, Yellow, Green, Blue and Terra Cotta, Silver Grey, etc. Special colors are available on request.

CURING SCHEDULE @ 70° F (21° C)

Tack free – 6 hours

Light traffic – 24 hours

Fully Cure – 7 days

APPLICATION PROCEDURES:

SEQUENCES OF APPLICATION

1. Surface preparation of the substrate.

2. Priming of the substrate.

3. Laying self-leveling epoxy floor topping.

SURFACE PREPARATION OF THE SUBSTRATE

The concrete should be at least 28 days old and shall be free from any contaminants such as oil, grease, curing membrane, etc. this can be achieved by mechanical means such as mechanical scarifier, shot/sand blaster, etc. if the substrate is acid etched it should be thoroughly cleaned with fresh water and allowed to dry. The cement laitance/projections shall be removed thoroughly and the pot holes shall be leveled with **CHEM-BOND 100** to achieve an even surface.

Note: if the moisture content of the concrete is more than 5% or if the rise in dampness is observed, the Technical Department of Chemi Tech can be contacted.

PRIMING:

The prepared substrate shall be primed with **CHEM-SEAL EP** before applying **CHEM-FLOOR SL EP** (refer Technical Data Sheet of **CHEM-SEAL EP** for application procedure).

Where the substrate is observed to be porous, it shall be primed again. The primer shall be allowed to dry "tack free", before laying **CHEM-FLOOR SL EP**.

NOTE: Application of **CHEM-FLOOR SL EP** shall not be delayed more than 24 hours after priming the substrate.

LAYING OF SELF-LEVELING EPOXY FLOOR MIXING:

The product comprises of three components, resin, hardener and filler. The hardener shall be poured into the base resin in the mixing vessel and shall be mixed thoroughly for 1 – 2 minutes using heavy duty slow speed drilling machine fitted with paddle. Aggregate shall then be added slowly and mixed for 3 – 5 minutes to achieve a uniform consistency. The areas to be laid shall be marked for every ½ packs to achieve a uniform thickness as recommended. For large areas, planning of laying sequences is essential. The Technical Department of Chemi Tech can be contacted for more information.

LAYING:

Continuous placement of an adequate quantity of material is necessary to provide the most uniform and level surface. Start in one corner and place a

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continuous stream of material along one edge of the area and back up the first placement strip as soon as possible to achieve a uniform, level surface. A serrated trowel shall be used to spread the material evenly to achieve the required thickness. Wait few minutes and then use a spiked roller to back roll the material to disperse any entrapped air and to further level the material. Light rolling may then be required if air release is still apparent in the surface. The rolling can be continued until the roller marks take two minutes to disappear.

EQUIPMENTS/TOOLS:

Shot/sand blaster, scabber, Grinder, Masking tap, Serated Trowel, heavy duty slow speed frilling machine fitted with suitable paddle, spiked roller, spiked shoes, brushes, etc.

PACKING AND COVERAGE:

27 kg pack covers 3.75 m² at 4mm thickness.

27 kg kits yield 15 ltrs.

SHELF LIFE:

In unopened packs **CHEM-FLOOR SL EP** has a life of 12 months when stored below 35° C.

CLEAN UP:

Clean tools and equipment with CHEM SOLVENT

PRECAUTIONS:

- Avoid application when the temperature are below 10 °C
- Store indoor at 7° to 43° C, do not use without primer.
- Solvents are Flammable. Keep away from heat. Sparks, open flame, or lighted cigarettes. Use explosion-proof application equipment.

ADDITIONAL INFORMATION:

CHEM-FLOOR SL EP is one of the range of self-leveling flooring products. In addition, Epoxy coatings, Epoxy Mortars and Integral Floor Hardeners are available to meet all industrial requirements.

RATINGS:

Poor – affected within 24 hours

Good – No effect for 24 hours

Excellent – No effect after two weeks

PHYSICAL PROPERTIES: (As per BS 6319)

Compressive strength – 60 N/mm²

flexural Strength – 32 N/mm²

Tensile strength - 17 N/mm²

ENGINEERING DATA:

Pot life at 24° C	20 – 40 minutes
Film Thickness	Minimum 2-4 mm
Flexibility	Excellent
Abrasion Resistance	Excellent
Weathering	Good
Solid Content	100%

CHEMICAL RESISTANCE:

Acetic acid 5%	excellent
Alkalis	excellent
Ammonia	excellent
Battery Acid	excellent
Bleach	excellent
Beer	excellent
Brake Fluid	excellent
Ethanol	Good
Ethylene Glycol	excellent
Gasoline	excellent
Hydrochloride Acid, 10%	excellent
MEK	Poor
Methylene Chloride	Poor
MIBK	Poor
Nitric Acid, 5%	Poor
Oil	Excellent
Phosphoric Acid, 30%	Poor
Salt Water	Excellent
Skydrol	Excellent
Toluene	Good
Urine	Excellent
Xylene	Excellent

