WHITECHEM EPOXY SL 510

1 – PRODUCT DESCRIPTION

Whitechem SL 510 is a two component, solvent free, self leveling, epoxy coating with high impact and abrasion strength with also a very good resistance against acidic and basic solutions.

2 – FEATURES & BENEFITS

- Solvent free
- High impact resistance
- Designed for application by brush and roller
- Excellent chemical resistance
- Excellent mechanical properties; high tensile and tear strength, abrasion resistance
- Resistant to bacterial and fungus growth
- Creates a glossy, easy to clean anti dust surface

3– APPLICATION AREAS

- High traffic car parking areas
- Warehouses
- Industrial floors
- Hotels
- Retail shopping areas
- Hospitals

4 – SURFACE PREPARATION & APPLICATION PROCEDURE

Surface Preparation: Before any application, we highly recommend grinding the surface with a stone or a diamond grinding machine. All surfaces should be clean, dry and free from loose materials, contaminations or any previous coatings. New concrete must be firm, clean and free of any adverse moisture conditions. The surface must have an appropriate surface profile and be well cured (28 days at temperatures over 21°C). Weak concrete particles removed and surface defects such as holes, voids and cracks must be fully exposed. Exposed surface must be repaired and filled with one of appropriate filler products. A standard concrete substrate conditions should be as follows:

- Compressive strength : > 20 N/mm^2
- Pull off strength : > 1.5 N/mm^2
- Humidity: W< 5%
- Temperature: between: 10 ^oC - 35 ^oC.
- Relative humidity: <85%

Priming: After proper surface preparation, prime all surfaces with a suitable primer (choose primer based on moisture content of substrate) by using a roller, or a brush. Sprinkle dry silica sand (size 0,3- 0,5mm) evenly onto the wet primer. The consumption of the primer is around 0,3-0,5 kg/m^2.

Mixing: Before mixing component A+B, mix component A thoroughly. Pour Component B into the Component A pail and mix using a low speed (300rpm) electric drill until mixture is completely homogenous. Pay particular attention to the wall lining and bottom of the pail.

Application Method: Immediately after mixing, pour out onto floor in a ribbon fashion, spread with a notched trowel, then back-roll with a fine nap adhesive roller to layer thickness of 2 mm.
In some cases (e.g. Nonslip floor, more economical etc.) silica sand can be added to the mixture. Increasing sand content will deteriorate the product quality, so it is recommended to do necessary tests before application. If sand is to be added, add to the A+B self leveling coating mixture, oven dry silica sand (0.1-0.3 diameter) in a mixing ratio of 1:1(by weight) to the resin+hardener and mix thoroughly. At the end, use a spiked roller to subsequently remove entrapped air.

Important: Application on wet and frozen surfaces should not be done. Precautions should be taken in areas exposed to water from the negative side or water vapor. Substrate moisture content and also adherence should be checked before application. Epoxy based products have limited working time. Pot life and curing time will be shorter at high temperatures and also will be longer at low temperatures. Especially in hot environments, mixture should be applied immediately and should not be left in the mixture box. The mixture that started to gel should not be applied to the surface. Mixture other than the specified mixture ratio should not be done.

5- PACKAGING

Component A: 15 Kg (Epoxy Resin)
Component B: 3 Kg (Hardener)

6- SHELF LIFE & STORAGE CONDITIONS

12 months at temperatures between 5°C and 30°C. Do not expose to direct sunlight. When not in use, the packages should be tightly closed. Packages must be protected from freezing.

7- TECHNICAL FEATURES

	METHOD	DATAS
Mix Ratio	-	5:1
Viscosity (Mixture) 23°C	ASTM D2196-99	1200-1800 cps
Density (Component A) 23°C	EN ISO 2811-1	1,70 g/cm^3
Density (Component B) 23°C	EN ISO 2811-1	1,02 g//cm^3
Density (Mixture)	EN ISO 2811-1	1,53 g/cm^3
Pot Life 23°C	INTERNAL	1 hours
Tack Free Time 23°C	INTERNAL	4 hours
Light Traffic	INTERNAL	24 hours
Heavy Traffic	INTERNAL	7 days
Shore A Hardness (After 7 days)	ASTM D2240	>90
Shrinkage	INTERNAL	0%
Adhesion to Concrete	ASTM D5441	>2N/mm^2
Application Temperature	-	10 °C- 35 °C

CHEMICAL RESISTANCE PROPERTIES

CHEMICAL NAME	RESULT	CHEMICAL NAME	RESULT	CHEMICAL NAME	RESULT
Sulfuric Acid (20%)	5	Gasoline	1	Mineral oil	5
Sulfuric Acid (30%)	5	Ammonium Hydroxide (20%)	5	Hydraulic oil	5
Hydrochloric Acid (10%)	2	Potassium Hydroxide (20%)	5	Toluene	2
Hydrochloric Acid (20%)	2	Sodium Hydroxide (50%)	5	Methanol	2
Nitric Acid (10%)	5	Brake Fluid	4	Ethanol (10%)	1
Acetic Acid (10%)	1	Drinking Water (1mg/L chlor)	5	Acetone	2
Hydrofluoric Acid (10%)	5	Vinegar (5%)	4	Diethyl Ether	5
Phosphoric acid (20%)	1	Hydrogen Peroxide (3%)	5	Xylene	2
Diesel	4				

5: RESISTANT **4:** RESISTANT**.** ONLY COLOR CHANGE 3. SWELLING **2:** CONDITIONS (SHORT-TERM DISCRIMINATION**)** 1: NOT RECOMMENDED