ULTRA EP 11 – TDS

Product Name:
Ultra EP 11
Product description:
Ultra EP 11 is a two part solvent free epoxy primer for use with ULTRA GREEN polyurethane screeds and self-smoothing epoxy floor coating, Blended with Fine Aggregate and use as a primer prior to applying thick applications of the Industrial Floor System, or other appropriate cement-based products. Where surfaces are very porous, more than one coat of primer may be required to achieve the desired bonding efficiency. For applications on new concrete or where the relative humidity (RH) of the substrate is in excess of 65%, good quality Damp Proof Membrane should be used. If the substrate is particularly smooth, the surface of the Ultra Prime 11 should be seeded with Fine Aggregate immediately after application to give a mechanical key to facilitate installation of resin screeds and toppings.
Advantages:
- Two part solvent free epoxy primer
- Easy to apply
- Seals substrates and acts as an bonding bridge
- For use with ULTRA GREEN epoxy, cement and polyurethane - based systems
- For Internal & External Use.

Area of usage:
Before top coating the Ultra EP 11 Primer will be applied on prepared surface.
Surface Preparations:
Thorough and appropriate surface preparation is essential for the long-term performance of the floor and is the foundation of any good flooring installation. The choice of technique to be used will be determined by the site conditions and sometimes will necessitate a combination of methods to ensure that a satisfactory substrate is achieved. Suitable methods include contained shot blasting and surface planning or scrabbling. Very oily or grease contaminated floors need particular care and treatment such as hot compressed air which should be used in combination with degreasing and mechanical preparation. Diamond grinders, along with scrabbling machines, can also be used to remove high spots from the surface; some scrabbling machines can remove up to 6mm of concrete in one pass and can therefore help to control levels. Whichever technique is used, the edges of the floor and any other areas where the large surface preparation machines cannot reach must also be prepared, typically by edge grinding.
Note: Percussive scrabbling is not normally recommended. A visual examination of the concrete surface is essential but will only give an overview of surface condition and damage sustained. The physical condition of the concrete also needs to be assessed for strength, including pull-off strength, moisture content and presence of an effective damp proof membrane.
General Application:
Surface strength should be tested after preparation, in accordance with BS 8204-6:2001. The long-term performance of any system bonded to a substrate depends on the adhesion achieved, which itself depends upon the substrate having sufficient cohesive strength and being thoroughly prepared. New direct finished base slabs or fine concrete screeds should be designed in accordance with BS 8204-1: 1999 lay to falls as necessary and not contain a water repellent admixture. Minor repairs to cracks or holes should be carried out using an appropriate product. Any joints or cracks subject to movement must be brought through to the final floor finish and a suitable movement joint profile and nosing joint detail used to avoid reflective cracking. Any resin based repairs which will be covered by ULTRA GREEN Industrial Products must be hard, sound and blinded with an appropriate aggregate. Once a new industrial floor has been installed it should be protected from other trades and contamination until the recommended curing period has elapsed
Substrate Preparation:
The concrete or screed substrate must be hard, sound and free of dust and other barrier materials such as paint, lime coatings, plaster, curing agents, laitance, adhesive residues etc. that will inhibit adhesion to the substrate. Use a suitable Degreaser to remove polish, wax, grease, oil and similar contaminating substances prior to mechanical preparation. Contaminated concrete surfaces should be mechanically prepared, either by scrabbling, grinding or contained shot blasting equipment or similar, and be vacuumed clean prior to applying ULTRA EP 11. Overwatered or otherwise weak concrete surfaces must also be suitably prepared down to sound, solid concrete by mechanical methods. Dust and other debris should be removed using vacuum equipment.

Note: Any joints or cracks in the concrete base where differential movement is anticipated e.g. movement joints, should be brought through to the finished surface and suitably sealed. New concrete slabs must be allowed to cure for at least 14 days.

Mixing:

The individual contents of the ULTRA EP 11 should be thoroughly stirred before being mixed together. The entire contents of the Part B should be poured into the Part A container and the two materials mixed thoroughly for at least 3 minutes using a heavy duty slow speed drill with a spiral paddle. Some of the mixed components should be reintroduced back into the hardener container in order to activate any residue and then poured back into the larger mixing vessel and re-mixed for 30 seconds. Mixing in this way will ensure product consistency and that any resin that remains in the containers after application will cure to provide for easier waste disposal

Application:

Once mixed, the material should be spread over the floor as self-heating in the container will reduce working time. Apply using a brush or short / medium pile roller. One or more coats may be needed to ensure that a uniform coating is achieved and to compensate for differences in surface porosity. All movement joints in the sub-floor must be carried through the topping and properly sealed. Construction joints and cracks not subject to movement may be overlaid but should the floor move in anyway, these defects will reflect through the system. Isolation joints will need to be allowed for in areas where high thermal movement is anticipated, e.g. around ovens and freezers.

Cleaning:

ULTRA EP 11 can be removed from tools and equipment by using Ultra epoxy remover immediately after use. Any hardened material will need to be removed mechanically.

Properties

The values shown are typical of results obtained in the laboratory at 27 ± 1ºC. Actual performance values obtained on site may vary from those quoted.

Physical Properties:

ULTRA EP11 @ 27 ± 1ºC

Working time 25 minutes Foot Traffic Approximately 6 hours ULTRA EP 11 should be allowed to cure prior to the installation of the final floor finish, typically 24 hours at 27 ± 1ºC.

Coverage Estimates:

Pack size: 5 kg

Coverage: Approximately Part A 3.125kg & Part B 1.875kg covers 20-25 m^2 per coat.

Note: These figures are theoretical, due to the wastages and the variety and nature of substrates practical coverage figures may be reduced.

Storage and Shelf Life:

ULTRA EP 11 has a shelf life of 12 months if kept in a dry, store between 5ºC and 30ºC in the original unopened containers. The product should be protected from frost, away from direct sunlight and sources of heat.

Maintenance of Resin Floorings:

The floor finish provides an aesthetic finish, a wearing surface and protects the substrate concrete from chemicals. To ensure that the appearance of the flooring is kept at its best performs as it should and stays in the required hygienic condition, it is important to follow good housekeeping and identify an appropriate regular cleaning regime. Generally a mechanical scrubber fitted with appropriate brushes and clean water rinsing, incorporating wet vacuum, will be most effective (using up to a maximum water temperature of 50ºC for epoxy systems). The use of the traditional mop and bucket technique is not appropriate. Heavily trafficked areas need to be cleaned more frequently. Only use cleaning liquids, such as neutral or low alkali detergents, which are recommended for use with resin flooring and ensure that the correct dilution is used. Beware of cleaning liquids/polishes that may leave an oily or otherwise slippery residue.

Note: Phosphoric acid based cleaners can damage epoxy resin based materials and hypochlorite based materials can cause [illegible]g. Undiluted cleaning chemicals can be [illegible]ressive and can stain and even damage [illegible]sin flooring. In food preparation areas [illegible]r high hygiene areas, pressure washing [illegible]bactericide at 60ºC to 80ºC or steam [illegible] should be used Heavy Duty [illegible]hane Screed Any spillages of chemicals, [illegible]rly corrosive chemicals, should be [illegible]off the surface as soon as possible to [illegible]e the risk of damage or discolouration to [illegible]. Drip trays should be used if necessary. [illegible]ges are allowed to dry, this results in [illegible]oncentrations of the materials which [illegible]l to discolouration or even early failure; [illegible]posits of mineral based cleaners can be

extremely difficult to remove. Any mechanical damage to the floor surface should be repaired as soon as possible to minimise the risk of damage spreading and the possibility of liquids penetrating along the bond line. Thin coatings may need to be over coated periodically to maintain performance, particularly in high traffic areas.

Note: The information supplied in this datasheet is based upon extensive experience and is given in good faith in order to help you. Our Company policy is one of continuous Research and Development; we therefore reserve the right to update this information at any time without prior notice. We also guarantee the consistent high quality of our products; however as we have no control over site conditions or the execution of the work, we accept no liability for any loss or damage which may arise as a result thereof.

Corporate office:

ULTRA GREEN CONSTRUCTION CHEMICALS
#42, 2nd main road
Palace Guttahalli main road
Near Vinayaka circle
Bangalore – 560003
Ph: 080-23537778
E-mail: info@ultragreencc.co
Web: www.ultragreencc.co