

ShaliFloor® SL AS 3EPU

3K Epoxy Polyurethane Self-Levelling Anti-Static Flooring



STP Limited

Description

ShaliFloor® SL AS 3EPU is a three component, monolithic, smooth, non-porous, hygienic, chemical resistant and easy to clean polyurethane self-leveling antistatic dissipative flooring system, which is laid at a thickness from 3 mm to 5 mm. It is a multi-layer system comprising **ShaliPrime® 2E ASC**, **ShaliFloor® SL AS 3EPU Base Coat** and **Top Coat** respectively. It is available in number of colours and has excellent flexibility / adhesion properties. It also provides a static dissipating floor with the use of additional earthing. A protective aliphatic coat of **ShaliFloor® TC 2PU** of 60 - 70 microns is suggested for colour retention of exposed areas.

Approvals / Standards

Conforms to Standard BS 2050 and ASTM D 257.

Product Information

Form; Colour	Component A = Liquid Resin, Component B = Liquid Hardener, Component C = Solid Extender; Available in any colour on request.
Handling & Storage	Store under cover out of direct sunlight and protect from extremes of temperature. In tropical climates the product must be stored in an air conditioned environment. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging.
Packaging	Available in cartoon consisting of primer ShaliPrime® 2E ASC (A+B) = 7.3 + 2.7 = 10 kg Base Coat ShaliFloor® SL AS 3EPU (A+B+C) = 6.81 + 2.55 + 5.64 = 15 kg Top Coat ShaliFloor® SL AS 3EPU (A+B+C) = 4.72 + 2 + 7.28 = 14 kg
Shelf Life	12 Months from the date of manufacture when maintain in protected storage in original unopened sealed condition at 5 - 40°C.
Handling Precautions	As with all chemical products, care should be taken during use and storage to avoid contact with eyes mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. Keep away from children and animals. After opening the seal, always consume total material.

Technical Characteristics 27°C, 55% RH

Properties	Standard	Result
Finish	--	Semi-gloss
Pot life, minutes	ASTM D 2471	30 - 40
Drying time		
Surface dry, hours		3 - 4
Hard dry, hours		20 - 26
Foot traffic, hours	ASTM C 722	60 - 72
Full cure, days		7
Theoretical Coverage*		
ShaliPrime® 2E ASC, gm / m ²		240 - 300
Base Coat, kg / m ² / mm	--	1.4 - 1.6
Top Coat, kg / m ² / 2 mm		3.5 - 3.8
Mixed Density, gm / cc		
ShaliPrime® 2E ASC	ASTM D 1457	1.05 - 1.1
ShaliFloor® SL AS 3EPU		1.75 - 1.9
Static Decay Test, sec	--	0.03 - 0.05
Abrasion resistance, CS 17, 1000 cycles, mg loss	ASTM D 4060	80 ± 20
Surface resistivity, ohms	ASTM D 257	N x 10 ⁶ to N x 10 ⁹ (where N = 1, 2, 3...)
Shore D Hardness, 7 days	ASTM D 2240	≥60

* These figures are theoretical and do not include for any additional material required due to surface porosity, surface profile, variations in level and wastage etc.

Field of Application

- The System is recommended wherever there is generation of static current.
- Industrial floors requiring hygiene and high abrasion resistance.
- Pharmaceutical industries / hospitals/operation theaters.
- Electronic assembly areas.
- Food/beverages / kitchens.
- Automobile industry / automobile showrooms / airport hangers.

Advantages

- Excellent self-leveling properties.
- Very hard impact and abrasion resistant.
- Resistance to chemicals, oil and water.
- Creates jointless, seamless dense surface facilitating cleaning and hygiene.
- Resists build-up of static electricity.
- Excellent chemical resistance.
- Dust proof finish.
- Available in wide range of colours.

Application Methodology

➤ Surface Preparation

- Remove all loose gravel, dirt, oil, grease and foreign matter by jet of dry air and clean the surface mechanically or by grinding to make it smooth before application. Ensure that new concrete must be 28 days old.
- Copper wire or copper strip may be used depending upon the availability and suitability of the site.
- **Laying of Copper Strip:** Remove the butter paper and expose the adhesive of the copper strip. Stick the self-adhesive copper strip on to the clean concrete substrate at a distance of 1M to each other, lengthwise and breadth wise. At the periphery, near to the walls, stick the self-adhesive copper strip at a distance of 6 inches from the walls. At any one end in the room, copper strip should be extended out for connection of earthing.

➤ Material Preparation

- Mix entire component A (Resin) & C (Filler) thoroughly by using speed drill mixer with a spiral type blade at the bottom of stirrer rod till homogeneous mix is obtained. Then add entire component B (Hardener) slowly, ensuring complete dispersion. After all of components have been added, mix for a minimum of 5 to 10 minutes.
- After stirring, wait for 5 minutes to ensure escape of entrapped air.

➤ Application of Material

- **Priming**
 - Prime the surface with **ShaliPrime® 2E ASC**.
 - Allow it to surface dry for 6 - 10 hours.
- **Base Coat**
 - Apply **ShaliFloor® SL AS 3EPU** base coat on primed surface.
 - Allow it to dry for minimum 12 hrs.
 - If necessary, roughen the surface with emery paper for better bonding of the top coat.
- **Top Coat**
 - Apply **ShaliFloor® SL AS 3EPU** over base coat.
 - Allow 72 hrs for using the floor.

Limitation

- **ShaliFloor® SL AS 3EPU** may show some color fading with time in exposed areas and where direct light is falling though Flooring properties remain unaltered.
- A protective coat with **ShaliFloor® TC 2PU** is suggested to stop colour fading.

Value base of product data

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control and different test methods.

Health and Safety information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent **Material Safety Data Sheet**.

- Please observe the precautionary notices displayed on the container.
- Use under well ventilated conditions.
- Do not inhale spray mist.
- Avoid skin contact.
- Spillage on the skin should immediately be removed with suitable cleanser, soap and water.
- Eyes should be well flushed with water and medical attention sought immediately.
- If swallowed, seek medical attention immediately. Do not induce vomiting.

Cleaning & Maintenance

Clean all tools immediately after use with ShaliPoxy Thinner only. Do not allow the material to harden.



STP Limited
Enhancing Structures' Life

Product Range

- Waterproofing and Insulation
- Road Surfacing
- Sealants and Additives
- Pipeline Coating
- Protective / Anti-Corrosive Coating
- Epoxy Flooring
- Grouts / Admixtures
- RestoFix- Repair / Rehabilitation
- Other Construction Chemicals



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