ETEPOX SOLUTION SDN BHD

TECHNICAL DATA SHEET

PUMF

A Self-Smoothing Polyurethane Screed

Etepox Solution Ref. ESSB 15/10

Product Description

PUMF is a self-smoothing 3 component thermal shock polyurethane floor coating. Seam less, high chemical, high mechanical properties, heat and slip resistance with matt finish.

Typical Uses

PUMF Area use for **GMP**, **HYGIENIC**, **HACCP** industrial floors in the food industry, beverage, seafood, meat, bakeries processing, cold storage, kitchen, pharmaceutical industrial, warehouses, logistics areas, palm oil processing and packaging plants.

Benefits

1) Hygienic hot water steaming clean.
2) Hard wearing, good abrasion resistance.
3) High chemical resistance against alkalis, acids and organic solvent.
4) High mechanicals and impact resistance.
5) Temperature service with wide range between -5°C to 100°C
6) Resist fungi, mildew and bacteria growth.
7) Solvent free, odorless.
8) After cured, non-cytotoxic response.

Physical Data			
1. Density (28ºC) g/cm³	1.9	11. BS 6920: Part 1 :2000 clause 6 Growth of Aquatic Microorganisms	<2.39 or less
2. Tensile strength	25 MPa	12. ASTM E96/E96M-10 Water Vapor Transmission, g/hr.m²	1.23± 1.23±
3. Compressive strength (28 days)	50N/mm²	13. Pot life (working time)	15ºC 30min 25ºC 25min 30ºC 22min
4. Adhesive strength	>2.0MPa (concrete failure)	14. Packing Size 20kg (3 components)	A:3kg / B:3kg / C:14kg
5. Flexural strength	21MPa	15. Mixing ratio by weight A : B : C	3 : 3 : 14
6.Colors	Standard MF Green, MF Red, MF Grey, MF Cream, MF Buff, MF Light Grey. **(Exposed to UV may occur colour change)**	16. Shelf life & storage (unopened and in good conditions temperature 10ºC to 30ºC)	12months
7. Service temperature	at 3mm : 5ºC ~ 80ºC(max) at 6mm : -5ºC ~ 100ºC(max)	17. Material consumption	1.9kg/m²@1mm
8. Shore D hardness	79 ~ 84	18. Recoating time(28°C)	within 14 to 18 hours
9. Cytotoxicity (2.4 or less)	below < 0.5	19. Curing time Human traffic Light traffic Fully chemical cure	15ºC 25ºC 32ºC 24hrs 24hrs 24hrs 36hrs 36hrs 36hrs 7days 6days 5days
10. ASTM D 4060 -10 Taber Abraser Wear Index in mg/100 revolutions/1kg	38mg		

* Use the above recommendations only as a guide. Variations in the number of coats and /or dry film thickness may be necessary, depending upon service requirements. Such variations will alter the spreading rate and may influence the drying time and recoating interval.

SUBSTRATE REQUIREMENT & PREPARATION:
Substrate concrete or screed should be a minimum of compressive strength 25N/mm² and adhesive pull-off strength of minimum 1.5N/mm². The substrate should be clean and free from laitance, oil, dust, loose constituents, paint residues, chemicals, algae and other contamination should be removed. The substrate should be dry and free from ground water pressure. If substrate moisture exceeded 7%, apply Epoxy Mortar (compressive strength 80N/mm²) 4-5mm thick as a moisture barrier. The substrate must be prepared by vacuum shot blasting, rough contaminations to remove by grinding. Cracks and hollows should be properly remedied. Prepare grooves 3mm wide x 3mm deep at all edges, bay joints columns, doorways and drains for anchoring purpose.

MIXING :
Shake Part A Polyol before pour into the barrel, pour all Part B and Part A into the clean mixing barrel and mix for 5 second by using a suitable electrical stirrer (with 750watt High Power Mixer), then only add in the pigmented Part C powder to mix at-least one minute and ten seconds until it fully achieved a homogeneous consistent.

APPLICATION :
Apply EM Prime (+/- 150 µ thick) or PUMF to do scratch coat (+/- 1mm thick) as a primer for sealing well the substrate porosity.
Usually within 14~24 hours; when EM Prime or PUMF scratch coat cured, then only allow to do layering PUMF Topping onto the EM Prime or PUMF scratch coat.
Must apply PUMF within the pot life (working time), spread the composite matrix with notched squeegee or pin rake and set it to the correct depth or requirement thickness. Immediately release the air/bubble by using spike roller.

TEMPERATURE CONDITIONS OF APPLICATIONS:
Do not apply when the relative humidity exceeds 90% on when the surface to be coated is less than 5% above the dew point.
Do not apply temperatures below 5°C and temperatures above 40°C

Maintenance and care after cure :
We recommend basic cleaning and maintenance will prolong the life of polyurethane floors, clean regularly using a single or double headed rotary scrubber drier in conjunction with alkaline detergent.

Further Information :
Warning and precautions information relating to the safe handling of this product should be found in Material Safety Data Sheet. To be advise to put on suitable clothing and eye-ware for protection purpose. The application area/site must be in good ventilation otherwise advisable to use a portable exhaust fan.