

# The Advanced Material

## The Significant Differences...

### PRODUCT DATA SHEET

Rev. 1/04.05

## SURESEAL ES5000 HEAVY DUTY EPOXY TOPPING

#### DESCRIPTION

**SURESEAL ES5000** is a pigmented three component trowel applied epoxy topping. The silica filled topping will form a 3 to 12 mm thick seamless floor that is resistant to most industrial chemicals. It is also recommended for vehicular traffic. It can be used as a moisture barrier for non-waterproofed concrete floor slabs.

#### RECOMMENDED USES

**SURESEAL ES5000** has been designed for floors subjected to high wear and tear, heavy vehicular traffic or exposure to strong industrial chemicals. The typical area where **SURESEAL ES5000** is most recommended includes engineering workshops, assembly plants, chemical plants, food and pharmaceutical factories and warehouses. **SURESEAL ES5000** can also be used for secondary containment in tank farms.

#### NOT RECOMMENDED FOR

Not suitable for continuous immersion in solvents and strong acids .

#### ADVANTAGES

- Seamless - prevents ingress of chemicals into the substrate and prevents bacterial growth.
- Hard wearing - suitable for vehicular traffic.
- Non-skid - prevents accidents in wet areas.
- Easy maintenance - facilitate house-keeping works and lower maintenance costs.
- Colour variety - available in wide range of colours to suit individual needs.

#### TYPICAL CHEMICAL RESISTANCE

EXPOSURE	SPLASH & SPILLAGE
Acids	Very Good
Alkali	Excellent
Solvents	Very Good
Salts	Excellent
Water	Excellent

For exposure to specific chemicals, please contact PLC Laboratory Technical Division for further assistance.

#### PHYSICAL DATA

Solids	: 100%
No. of Components	: Three
Mixing Ratio	: A:B:C / 2.8 :0.7:25 kg
Recommended thickness	: 3 mm to 12 mm thick.
Theoretical Coverage	: 10 kg/m <sup>2</sup> @ 5mm thickness
Pot Life	: 20 minutes at 30°C
Packing Size	: Part A - 2.8kg Part B - 0.7kg Part C - 25kg
Drying Time	
Initial cure	: 24 hours
Full traffic	: 48 hours
Full cure	: 7 days
Compressive Strength	: 85 N / mm <sup>2</sup>
Flexural Strength	: 38 N / mm <sup>2</sup>
Tensile Strength	: 50 N / mm <sup>2</sup>
Shore-D Hardness	: 77 - 74
Water Absorption	: 0.45%
Abrasion Resistance (Taber)	: 0.038gm / 1000 cycle.

#### APPLICATION INSTRUCTIONS

**Surface Preparation** : Concrete surface should be clean and free from oil, grease and other contaminants. New concrete shall be allowed to cure for at least 28 days before application of primer. Surface preparation by captive blasting or scarifier is preferred.

**Primer** : Application a layer of **SURESEAL PS 38** will enhance the adhesion of the screed materials to the concrete slab.

**Mixing** : Stir PART A thoroughly then empty PART B into PART A container and mix till homogeneous. Add gradually the entire content of PART C, quartz silica into the mixture while stirring. Continue until a homogenous mixture is achieved. The materials can be compacted by manual hand trowel or power trowel.

**Application** : Pour the mixture of Components A, B and C onto the primed surface and spread evenly with steel trowel. The spreading work can be carried out while SURESEAL PS38 is still tacky.

**Sealer** : A layer of **SURESEAL ES 5000** Binder, SURESEAL SF or PLC 118 ST is over the mortar to seal the porous surface prior to application of top-coats.