

PRODUCT DATA SHEET

FLOROCRETE PU MD

DESCRIPTION:

FLOROCRETE PU MD is a 4-component colored polyurethane floor finish with antimicrobial properties, applied smoothly in a matte texture at a thickness of 3-4 mm.

APPLICATION:

- Food processing industries & Beverage plants
- Chemical Plants
- Warehouse & Storages Areas
- Pharmaceuticals Plants
- Meat <Poultry and Fish Processing Plants.
- Hotels And Kitchen

KEY FEATURES:



Hygienic: Contains Polygene[®], an antimicrobial additive inhibiting bacteria growth.



Chemical Resistance: Shields against the majority of acids used in manufacturing processes.



Abrasion Resistant: Provides a hard-wearing and abrasion-resistant finish to protect the substrate.



Temperature Resistant: Exhibits excellent thermal shock properties and resistance to extreme temperatures.



HACCP Certified: Guarantees food safety for wet and dry food handling areas.

PRODUCT INFORMATION:

Composition:	Formulated with a polyurethane
Packaging & Appearance	Part A+B+C+D pre-batched 20 kg set
	Part A (White Liquid): 2.97 kg container
	Part B (Dark brown Liquid): 2.84 kg container
	Part C (White Powder) : 13.94 kg bag.
	Part D(Green , Grey, Buff , Light Grey, Light Blue , Silver Grey ,Cream, Mustard): 0.25 Kg container
Storage	This Product must be store in original, unopened and undamaged sealed packaging in dry condition of temperature between 5° c and 30° c
Density :	1.86 kg/L (PART A+B+C+D Mixed , +27 ° C)

TECHNICAL PROFILE:

Fire Resistance:	V0	(UL-94)
Slip Resistance	Method described in BS 7976-2 (typical values for 4-S rubber slider) Dry: >40 Wet: Depends on specification (in accordance with HSE and UKSRG guidelines)	
Impact Resistance:	15 Nm	
Vapour Permeability:	Nil – Karsten test (impermeable)	
Temperature Resistance:	From -5°C to 70°C (at 3mm) From -15°C to 90°C (at 4mm)	
Abrasion Resistance:	= 23 mg (at 1 kg weight and 1000 cycles)	(ASTM D 4060-20)
Compressive Strength:	~ 52 Mpa	(ASTM D 695-236)
Flexural Strength:	~ 19 Mpa	(ASTM D 790-18)
Tensile Strength:	~ 15 Mpa	(ASTM D 638-18)

SYSTEM INFORMATION

System	Layer	Product
	Scratch coat	FLOROCRETE PU MD
	Top coat	FLOROCRETE PU MD

APPLICATION INFORMATION

Consumption :	3.0 mm Thickness		
	Layer	Product	Consumption
	Scratch coat	FLOROCRETE PU MD	~1.8 kg/m ²
	Top coat	FLOROCRETE PU MD	~3.6 kg/m ²

4.0 mm Thickness				
Layer	Product	Consumption		
Scratch coat	FLOROCRETE PU MD	~1.8 kg/m ²		
Top coat	FLOROCRETE PU MD	~5.2 kg/m ²		
Ambient air temperature	+10 °C min. / +35 °C max.			
Relative air humidity:	80 % max			
Applied product ready for use:	SPEED OF CURE	10°C	20°C	30°C
	Light Traffic	36 h	24 h	12h
	Full Traffic	72 h	48 h	24 h
	Full Chemical Cure	10 D	7 D	6 D

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY:

- The concrete substrate should have adequate compressive strength (minimum 25 N/mm²) and minimum pull-off strength of 1.5 N/mm².
- Ensure the substrate is free from contaminants such as oil, grease, coatings, and surface treatments.
- The product can be applied on green or damp concrete surfaces without standing water.
- Allow at least 3 days for early concrete shrinkage to occur to prevent shrinkage cracks on the wearing surface.

SURFACE PREPARATION

Inadequate preparation will lead to loss of adhesion and failure. Shot blasting or scarification is therefore preferred for these systems. Acid etching is not recommended. Anchorage grooves should be cut to a minimum of twice the thickness to be laid, up to a maximum of 10 mm x 10 mm, which is higher, at the edges, day joints, up-stands, drains, doorways and at regular termination across the floor, and all debris removed. Concrete surface to be prepared with scarrifier, depending on the thickness of FLOROCRETE PU to be applied.

1. New concrete floors

The base should be a minimum of Grade M25 and should not contain a water repellent admixture. The surface strength when assessed using a rebound hammer should be above 25 or the surface tensile strength should exceed 1.5 MPa. The laitance and any surface sealer or curing membrane should be removed by mechanical means such as shot-blasting or grinding to expose the coarse aggregate. After surface preparation, all loose debris and dirt should be removed by vacuum equipment. For concrete bases in contact with the ground, a damp-proof membrane should have been incorporated into the slab design.

2. Old concrete floors

All laitance and surface contamination should be removed by mechanical means such as shot-blasting or diamond grinding to expose the coarse aggregate. After surface preparation, all loose debris and dirt should be removed by vacuum. Heavy oil or grease deposits should be removed either mechanically, or by steam cleaning, or by biological treatment. Where oil or grease contamination has been severe or of long duration, these methods may prove unsatisfactory and in these cases removal of the affected base is necessary. In existing buildings without a

functioning damp-proof membrane, the application of a surface-applied membrane should be considered. Hydrostatic pressure may, under certain circumstances, cause adhesive failure between the flooring and the substrate. Where this is likely to occur, such as in areas where the ground water table is higher than the substrate, and where external tanking has not been applied, pressure relief must be provided, e.g. by direct drainage. A close visual examination should be made to verify cleanliness and soundness. Any weak or suspect areas should be repaired.

MIXING

- A forced-action rotary paddle mixer is recommended for mixing the product.
- Drain the contents of the liquid base and DPI and to be mixed well for homogenous mixing, followed by liquid hardener components into a large plastic container and mix briefly.
- Add slowly the Part C and continue mixing for at least 1.5 minute, until a lump-free mix is obtained.

APPLICATION

1. Scratch coating :

FLOROCRETE PU MD should be applied as a scratch coat at a coverage rate of up to a nominal 1 mm thickness; actual coverage rate will depend on concrete surface texture and porosity. This scratch coat is designed to prime and seal the floor. Mix (see Application below) and spread evenly by trowel. The scratch coat should be allowed to cure for 12 - 48 hours at 20°C before applying the FLOROCRETE PU MD top coat.

2. Application of FLOROCRETE PU MD topping

After Mixing, Immediately discharge and spread the mix over the application area, using a notched trowel to achieve the required coverage rate, to built up minimum thickness of 3 to 4 mm topcoat. De-aerate using a spiked roller. Spike rolling should be carried out within 6 minutes of application in order to avoid interfering with flow and surface finish. Ensure that anchorage grooves are fully wetted out with material. Do not return to spike roll older applied areas as the product is fast-setting and this action will leave spoiling marks on the applied floor. Polythene should not be used. Protect the installed floor from damp, condensation and water for at least 3 days.

AFTERCARE, CLEANING & MAINTENANCE:

- For effective aftercare, clean the FLOROCRETE PU MD surface regularly using a single or double-headed rotary scrubber drier.
- Use a mildly alkaline detergent in conjunction with the scrubber for optimal cleaning results.

SAFETY GUIDELINES:

- Keep containers tightly sealed when not in use.
- Avoid skin contact and inhalation of fumes (if any).
- When spraying, it is advisable to wear a mask for personal protection.
- If the substance comes in contact with the body, wash the affected parts thoroughly with plenty of water.
- In case of persistent irritation, seek medical attention and consult a physician.