

MC-DUR PowerCoat 230

Primer and sealer. Self-levelling PU flow coating.

DESCRIPTION:

MC-DUR PowerCoat 230 is a 4-component, flow applied and self smoothing polyurethane topping designed for thin layer applications and repairs in matt finish. Can be used as a new topping over old or worn out polyurethane floors.

PRODUCT PROPERTIES:

- Excellent chemical resistance.
- Resists bacterial growth; fungi, mold and mildew.
- Easily cleaned and maintained smooth seamless surface.
- High-density systems with maximum wear, abrasion and impact resistance.
- User-friendly, no solvent odour during installation.
- One of the fastest "turnaround time" polymer modified product which reduces cost.
- High temperature resistance up to 80°C at 3mm thickness
- Seamless without joints for optimum sanitation and hygienic finish.

AREAS OF APPLICATION:

- Ideal area of application includes:
 - Hygienic flooring for kitchen, wetfood, beverage processing and packaging plants,...
 - Chemical resistance flooring for chemical process, containment area and wash down rooms,...
 - Thermal shock resistance flooring for freezers, refrigerators, and oven installed spaces.
 - Mechanically durable flooring for loading docks and warehouses,...

APPLICATION ADVICE:

Surface requirement & preparation:

- Suitable substrates are concrete or modified polymer screeds with a minimum compressive strength of 25N/mm² and pull-off strength of 1.5N/mm².
- Substrate to be coated must be clean, free from dust, oil, water, paint residues, loose constituents or any contaminants. Make use of a concrete surface planer, grit blasting, surface grinding or other mechanical means until a flat, rough profile is evident. Prepare grooves, 5mm(wide) x 5mm(deep), at all edges, bay joints columns, doorways, and drains for anchoring purpose.

Mixing:

Shake the containers of components A and B before use. First put component A into a clean mixing vessel and stir in component D MC-DUR PowerCoat Color (pigment). Then stir in component B. Stir the liquid components with a slow-running stirrer for approx. 1 minute until a homogeneous, streak-free mixture is obtained.

The aggregate (component C) is now added to the premixed resin components and mixed homogeneously. The use of a compulsory mixer is required for mixing the resin components with the aggregate. The mixing time depends on the pre-storage temperature of component C. At 18 - 22°C, a mixing time of 3 minutes must be observed.

Application:

- Apply **MC-DUR PowerCoat 230** within its pot life.
- Spread the composite matrix to thickness of 3-6mm and consolidate with pin rake or notched squeegee set to the correct depth. Immediately release any trapped air by spike rolling.

Temperature:

MC-DUR PowerCoat 230 should not be applied on material or floor temperatures below 10°C. Temperatures should not fall below 5°C in the first 24 hours after application. **MC-DUR PowerCoat 230** is not designed for immersion.

Service temperatures:

- At 3 mm : Resistance up to 80°C & for freezer temperatures -5°C
- At 6 mm : Resistance up to 90°C & for freezer temperatures -5°C

Curing:

	25°C @ 75% RH	35°C @ 75% RH
Foot traffic. (hr)	10	8
Light traffic. (hr)	24	18
Full traffic. (hr)	48	24
Full cure. (days)	7	5

Substrate movement:

All moving joints must be carried through **MC-DUR PowerCoat 230** and properly sealed. Construction joints and cracks may be covered but if substrate movement occurs, the **MC-DUR PowerCoat 230** will reflect the cracks.

Chemical resistance:

MC-DUR PowerCoat 230 will resist spillages of :

- Dilute and concentrated acids: hydrochloric, nitric, phosphoric and sulphuric.
- Dilute and concentrated alkalis, including sodium hydroxide to 50% concentration.
- Most dilute and concentrated organic acids.
- Fats, oil and sugar.
- Mineral oils, kerosene, gasoline and brake fluids.
- Most organic solvents.

Cleaning:

Clean all tools with Washing Thinner or other solvents before the material hardens. Small unreacted Part B in container is to be decontaminated with a 5% solution of washing soda (sodium carbonate) prior to disposal. After material has set it is virtually impossible to get off and will only wear off over time.

Maintenance:

Regular cleaning and maintenance will prolong the life of all resin floors, enhance the appearance and reduce the tendency to retain dirt.

TECHNICAL DATA:

Characteristic	Unit	Value	Comment
No. of Components		4	
Shore D hardness		80 - 85	ASTM D2240
Estimated Coverage	kg/m ² /3mm	5.7	
	kg/m ² /1mm	1.9	
Mixing Ratio	By weight (kg)	2.85 : 3 : 14 : 0.15	Part A : Part B : Part C : Part D
Density	kg/mm/m ²	1.9	
Compressive strength	N/mm ²	48 - 52	ASTM C942
Tensile strength	N/mm ²	7 - 9	ASTM D638-14
Flexural strength	N/mm ²	19 - 21	ASTM C348 : 2002
Tensile adhesion strength	N/mm ²	Concrete failure > 1.5	EN 1542
Temperature resistance	°C	80	
Pot life	Minutes	15	at 30°C
		20	at 20°C

PRODUCT CHARACTERISTICS:

Color	Available in six standard colors: Red, Green, Cream, Light Grey, Dark Grey and Brown Beige.
Storage	Unopened in dry conditions between 10°C - 32°C.
Shelf Life	Component A, B and D: 12 months. Component C: 6 months.
Packaging	20kg

Safety instructions: Please note the safety information and advice given on the packaging labels and safety data sheets. GISCODE : PU40.

Note: The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are only binding if given in written form. The accepted engineering rules must be observed at all times.

Edition 04/24. Some technical changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.