Hypercrete 3K

Three-component polyurethane-cement flooring system for high-performance industrial floors.

> 60	> 80	-15/+100	4–10	2.0
Compressive strength, N/mm²	Hardness, Shore D	Service temperature, °C	Layer thickness, mm	Consumption, kg/m² per mm

DESCRIPTION

Hypercrete 3K is a three-component polyurethane-cement system for heavy-duty industrial floors. With a compressive strength above 60 N/mm² and Shore D hardness above 80, it is used in food and beverage plants, the chemical and pharmaceutical industry, healthcare, electronics and mechanical engineering.

It is specified where maximum mechanical, physical and chemical resistance is required. The trowelled surface is smooth; a protective topcoat is optional, depending on the application.

Non-toxic in contact with food and drinking water. For indoor and outdoor use; outdoors the surface may discolour.

RECOMMENDED FOR

- Industrial floors in food and beverage, chemical, pharmaceutical, healthcare, electronics and mechanical engineering plants
- Anti-static, non-sparking, anti-slip, dust-free and decorative floor finishes
- Waterproofing and protection of roofs, terraces and balconies

MAIN FEATURES

- Bonds to all common construction materials
- Monolithic, abrasion- and wear-resistant layer
- Smooth finish; no topcoat required, optional per application
- Fast curing: light traffic after 24 hours, heavy traffic after 3 days
- Wide service temperature range; non-flammable
- Resists hot water from 60 to 90 °C
- High biological and chemical resistance
- Can be applied to damp substrates
- Resists negative hydrostatic pressure
- Non-toxic

PACKAGING

Part A	3.50 kg
Part B	3.50 kg
Part C	17.20 kg
Kit	24.20 kg

Colour: neutral grey, suitable for pigmentation.

SUBSTRATE

No primer is required when the concrete substrate meets these conditions:

Surface hardness, R28	15 MPa
Surface moisture	W < 10 %
Application temperature	5–35 °C
Relative humidity	< 85 %

SURFACE PREPARATION

Remove loose material, dust, organic growth, salts and oil. Pre-wet the substrate thoroughly with a high flow of water before application. Seal all cracks, holes and pores with suitable products. Poor-quality or contaminated substrates cannot be brought to an acceptable condition with a primer.

MIXING

1. Mix Part C with Part B for 1–2 minutes.
2. Add Part A.
3. Mix for 3–4 minutes until homogeneous, with a low-speed mixer (150–200 rpm).

APPLICATION

Spread the mixed material at a thickness of 4–10 mm. Finish with a steel trowel. Pass a spiked roller to release trapped air.

CONSUMPTION

Approx. 2 kg/m² per mm of thickness.

CLEANING

Wipe tools with dry paper or cloth first, then clean with a suitable solvent. Do not reuse rollers.

STORAGE

At least 6 months from the production date in the original, unopened packaging, in a dry place at 5–30 °C. Once opened, use immediately. Keep away from children.

SAFETY

Consult the safety data sheet (SDS) before use.

TECHNICAL DATA

Liquid, before application

PROPERTY	UNIT	METHOD	VALUE
Specific weight, 20 °C	g/cm³	ASTM D1475 / DIN 53217 / ISO 2811	1.85
Pot life, 25 °C, 55 % RH	min	Internal method	12–15
Drying time, 25 °C, 55 % RH	h	–	3

TECHNICAL DATA, CONTINUED

Cured, after application

PROPERTY	UNIT	METHOD	VALUE
Service temperature	°C	–	-15 to +100
Max. short-term temperature (shock)	°C	–	250
Hardness	Shore D	ASTM D2240 / DIN 53505 / ISO R868	> 80
Tensile strength at break, 23 °C	N/mm²	ASTM D412 / EN ISO 527-3	> 9
Adhesion to concrete	N/mm²	ASTM D4541	> 3
Compressive strength	N/mm²	–	> 60
Light traffic, 25 °C, 55 % RH	h	–	24
Heavy traffic	days	–	3

CHEMICAL RESISTANCE

Exposure period 12 months. Data for specific acids, solvents and lubricants on request.

EXPOSURE TO	RESULT
Ethyl glycol acetate	OK
Acetone	Softened after 10 days
Salt (NaCl) 10 %	OK
Alcohol 10 %	OK
Ammonia 10 %	Micro-blisters after 20 days
Distilled water	OK
Petrol	OK
Lactic acid 25 %	OK
Sugar 30 %	OK
Seawater	OK
Sulphuric acid 10 %	OK
Caustic potash 10 %	OK
Citric acid 10 %	OK

EXPOSURE TO	RESULT
Cresol	Destroyed after 5 days
Fatty acids	OK
Formic acid 10 %	Micro-blisters after 8 days
Nitric acid 10 %	OK
Xylene	OK
Acetic acid 10 %	Micro-blisters after 10 days
Drinking water	OK
Soda 10 %	OK
Tannic acid	OK
Hydrochloric acid 10 %	OK
Hydrogen peroxide 10 %	OK
Sodium hypochlorite 3 %	OK
Methylene chloride	Destroyed after 1 day

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