

Kretesil

**OSMOTIC TECHNOLOGICAL MORTAR FOR
WATERPROOFING WATER-CONTAINING
CONCRETE STRUCTURES.**



TECHNICAL DATA SHEET

DESCRIPTION

KRETESIL is an osmotic cement waterproofing mortar composed of high-strength hydraulic binders, hydrophobic agents and synthetic resins. It adheres strongly to the substrate, remains impermeable even in thin layers and is easily applied by brush, roller or smooth spatula.

WATERPROOFING ACTION

KRETESIL provides waterproofing against both positive and negative pressure on monolithic, clean and sound cement structures and surfaces. Its osmotic penetration deeply blocks the capillaries of the substrate.

FIELDS OF APPLICATION

Suitable for waterproofing water-containing structures including swimming pools, tanks, purification plants and channels, as well as foundation walls, lift chambers, cellars and tunnels.

REINFORCED APPLICATIONS

For large surfaces or where particular mechanical strength is required, interlay ARMOFLEX 130 alkali-resistant fibreglass reinforcement between the first and second coats and use KRETESIL FLEX liquid resin.

The revised Colmef Lebanon packaging provides a standard one-bag set and a bulk four-bag set for use with KRETESIL FLEX liquid.

MIXING CONFIGURATIONS

- Standard set: mix one 20 kg KRETESIL powder bag with one 4 kg KRETESIL FLEX liquid container.
- Bulk set: mix four 20 kg KRETESIL powder bags with one 19 kg KRETESIL FLEX liquid pail.
- Mix until a uniform, workable mortar is obtained and use within approximately 1 hour.

APPLICATION

- Apply by brush, roller or smooth spatula in at least two coats.
- Apply at temperatures from +5 °C to +30 °C.
- Apply 2 mm per coat, up to a maximum total thickness of 5 mm.
- Do not exceed 24 hours between coats and allow at least 7 days before commissioning.
- For reinforced applications, embed ARMOFLEX 130 between the first and second coats.

PACKAGING

KRETESIL powder: 20 kg bag. KRETESIL FLEX liquid: 4 kg container or 19 kg pail. Pair one 20 kg powder bag with one 4 kg liquid container, or four 20 kg powder bags with one 19 kg liquid pail. No pallet quantities are specified.

SPECIFICATIONS

Waterproof concrete subject to positive and negative pressure using an osmotic cement mortar, KRETESIL type by Colmef Srl, applied in at least two coats by brush, roller or smooth spatula. Where required, interlay ARMOFLEX 130 reinforcement and mix with KRETESIL FLEX resin. Consumption: 1.5 kg/m² per millimetre of thickness.

TEST CONDITIONS

Tests performed at 23 °C and 50% relative humidity in the absence of air ventilation.

TECHNICAL DATA

Property	Unit	Value
Appearance	-	Grey or white powder
Apparent specific weight	g/cm ³	1.25
Maximum granulometry	mm	0.4
Solid residue	%	100
Standard package combination	kg	20 powder + 4 liquid
Standard powder : liquid ratio	by weight	5 : 1
Bulk package combination	kg	80 powder + 19 liquid
Bulk powder : liquid ratio	by weight	80 : 19 (approx. 4.21 : 1)
Volumetric mass of mix	g/cm ³	1.7
pH of mix	-	≥ 12
Application temperature	°C	+5 to +30
Pot life of mix	hours	Approx. 1
Thickness applicable per coat	mm	2
Maximum thickness possible	mm	5
Waiting time between coats	hours	≤ 24
Commissioning	days	≥ 7
Consumption per mm thickness	kg/m ²	1.5
Consumption by application	kg/m ²	3-6

FINAL PERFORMANCE

Property	Unit	Value
Resistance to water pressure at 2 mm	bar	≥ 3
Resistance to water pressure at 5 mm	bar	≥ 6
Adhesion on concrete at 28 days	MPa	≥ 2.0
Compressive strength at 28 days	MPa	≥ 25.0
Flexural strength at 28 days	MPa	≥ 6.0
Permeability to water vapour	-	S _D < 1

LIQUID PACK RATIOS REVISED; ORIGINAL PERFORMANCE DATA SHOULD BE VERIFIED BY COLMEF TECHNICAL/QC.

The information in this bulletin is based on our best experience. We cannot be held liable for product misuse. Anyone intending to use this product should assess whether it is suitable for the intended application and perform preliminary tests. Always refer to the latest updated technical data sheet and Safety Data Sheet available from Colmef.

FOR MORE INFORMATION OR PARTICULAR USES, CONTACT THE COLMEF TECHNICAL SUPPORT DEPARTMENT.

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