

kalox-pool

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KALOX-POOL

Waterproof cement-based mortar for protecting and finishing concrete.

refurbishing and finishing

TECHNOKOLLA





8-30°C



Trowel



4 mm

kalox-pool



MAIN FEATURES

- Two-component product
- Highly protective
- High resistance to chlorinated water
- Waterproof
- Pigmentable for coloured finishes

APPEARANCE

- Comp. A: white liquid
- Comp. B: white powder
- Mix: white

STORAGE

12 months from date of manufacture if stored correctly in cool, dry place in original sealed, undamaged package.

FIELDS OF USE

- Protection of concrete surfaces, in accordance with standard EN 1504-9, Actions: 1: protection against penetration (cladding); 2: humidity control (cladding); 8: increased resistivity (cladding).
- Visually exposed pigmentable finishing treatment for swimming pools.
- Protection treatment for water works such as: pools, tanks, concrete pipes.
- Flexible coating for reinforcing concrete surfaces and protecting them against the effects of deicing salt and freezing-thawing cycles, carbon dioxide and water in the liquid state.
- Waterproofing surfaces exposed to the weather.

SUBSTRATES

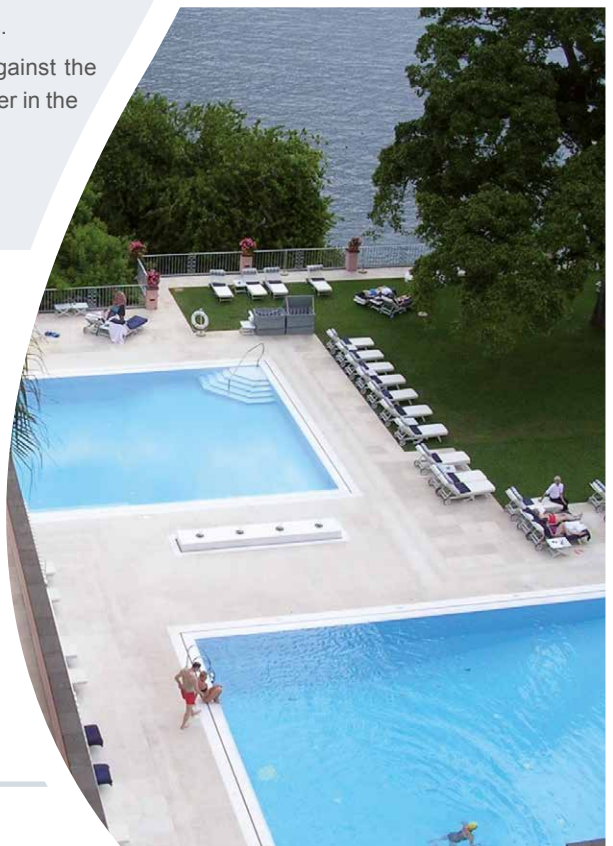
Concrete, cement-based plaster, cement-lime mortar, cement-based screeds.

NATURE OF THE PRODUCT

Comp. A contains organic copolymers in watery dispersion and specific additives. Comp. B consists of high-strength cements, selected quartz mineral charges and specific additives.

For further details, ask the technical office for the safety brief or download it from the web site www.technokolla.com.

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RECOMMENDED ACCESSORIES

Blender



437094
RASOLASTIK NET



437337
Strip RL 120



Notched trowel

HOW TO PREPARE THE SUBSTRATE

The substrate must be structurally sound and free from all traces of contaminants, crumbling material, parts that are about to detach, efflorescence, oil, grease, etc. It must be sandblasted or cleaned by high-pressure water jet cleaner.

Avoid cleaning methods that create impact or vibration. If the substrate is made of concrete, its "pull off" resistance must be $> 1.5 \text{ N/mm}^2$. Concrete that is poorly resistant, damaged or with parts that are beginning to detach must be repaired with mortar such as GAP or GAP-R. If necessary, use mortar to plug gravel pockets, damaged edges or cavities created by form spacers. Wet the surface liberally before applying KALOX-POOL. The wet surface must look dark and mat, not glossy. There must be no liquid water on the surface. The product can be coloured with water-based acrylic paste pigments. To a better distribution in the mass, it is recommended to mix previously the paste with comp. A (liquid), shake the tank before mixing with the comp. B (powder).

It is possible to obtain pastel shades. Do not try to get particularly strong or very dark colors. Pigments stable to light, to water action and to oxidizing agents (e.g. chlorine content for swimming pools) are recommended, otherwise discoloration or color change in the coating may happen.

HOW TO PREPARE THE MIXTURE

Blend KALOX-POOL using an electric blender at low speed ($\sim 500 \text{ rpm}$). Thoroughly stir component A (liquid) prior to use. After this, pour approximately half component A into a suitable vessel and add component B (powder). Continue to stir slowly. Once the mixture has become smooth and homogeneous, add the remaining amount of component A and stir thoroughly for at least 3-4 minutes until mixture is homogeneous and lump-free.

Do not add water or other ingredients: the two components must be perfectly blended together so as to prevent the particles of aggregate in the powder component from being distributed unevenly through the mixture.

APPLICATION OPERATIONS

Spread the first layer of Kalox-pool with a serrated trowel (3x3 millimeters). Exercise a fair amount of pressure on the substrate so as to obtain regular, even thickness in the same direction. Position RASOLASTIK-NET, the special alkali-resistant fibreglass netting, onto this first layer of wet mortar and press it completely into the mortar using a smooth trowel. Once the first layer has hardened, apply the second one with a smooth trowel. Work over the first application in the crosswise direction. Kalox-pool can also be applied by spraying. Excellent surface finishes can be obtained with a sponge float, used just as the mortar starts to harden. Use a smooth metal trowel for a smooth finish. Apply STRIP RL 120 to the first wet layer and cover it with the second layer of mortar to reinforce the waterproofing layer on a level with floor joints and other critical areas (e.g. where the floor meets vertical surfaces).

2 mm is the maximum thickness recommended for each layer. Mortar 4 mm thick applied in 2 coats is the ideal application for waterproofing and protecting concrete. Indicatively, tanks or swimming pools can be filled with water 5/7 days after application. Filling must proceed continuously and without interruptions, so as to prevent the colour from streaking on the coating as it hardens. Keep the walls wet if swimming pool filling is delayed longer than one day. Do not do this unless the coating has completely hardened.

The water must not be subjected to any sort of chemical treatment during the first week after filling. During the following weeks, the water must only be disinfected until its pH has stabilized. Once the pH value is stable, the degree of mineralization in the water can be checked and adjusted as necessary.

CONSUMPTION

2 kg/m² per mm of thickness

WARNINGS AND RECOMMENDATIONS

- protect from rain until at least 6 hours from application.
- avoid application and protect freshly applied material from: direct sunlight and/or strong wind, rain.
- subgrade must be statically sound and fitted with regular expansion joints to absorb all the expected structural displacements.
- use only products specifically designed for swimming pools, and follow the dosage recommended by the manufacturer.
- if KALOX-POOL is used on rigid substrates, such as the protective coating on reinforced cement, it can be applied without fiberglass net between the two layers.
- do not allow concentrated products (disinfectants, pH-adjustment products) to come into direct contact with the coating. For example, do not pour such products down the walls and allow them to dissolve on the bottom.
- avoid using the product in case of electrolytic water treatment systems based on magnesium/potassium salts, which may damage the coating.
- excessively concentrated shock treatments can damage the coating
- certain electrolytic water treatment systems can stain the coating: ask the manufacturers for information.
- do not use copper sulphate as an algae inhibitor or hydrochloric acid to clean the swimming pool.
- the general instructions for treating swimming pool water in the best possible way allow the water to maintain its chemical balance (pH approx. 7 and hardness within 10-15°F).
- if the pH is adjusted automatically, check regularly to make sure that the appliance functions correctly. If faults occur, an excessive amount of pH-adjuster could lower the pH value and demineralize the water, thereby damaging the coating.
- as with all finishing coatings and similar products, KALOX-POOL may be subject to the development of micro-organisms (algae, mould, etc.), sometimes in the form of different coloured stains (brown, grey, green...). This proliferation is due to external factors and needs specific treatments (algicides, biocides, bactericides...)
- do not use metal tools (brushes, knives...) to clean the existing coating since the particles they leave could cause rust to form.
- the general guidelines for optimal treatment of swimming pool, keeps the water in its chemical balance (pH around 7 with a hardness within 10-15°F)
- in the case of automatic pH control, ensure the smooth operation of the device. In case of failure, placing excessive pH correction can cause a drop in pH and demineralization of water, causing the degradation of the coating.
- like all similar coatings, KALOX-POOL may be subject to the development of microorganisms (algae, fungi, etc.) that occur sometimes with the appearance of spots of different colors (brown, grey, green ...); this proliferation of microorganisms is caused by agents external with respect to products, and you

HOW TO CLEAN THE TOOLS

Clean all tools and utensils with clean water immediately after use. Once hardened, the product can only be scraped off.

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TECHNICAL DATA	COMPONENT A	COMPONENT B
Appearance	White liquid	White powder
Maximum diameter of aggregate		0.5 mm
Mixing ratio	1	4

REQUIREMENTS (STANDARD EN 1504-2)	VALUE	REQUIREMENT	STANDARD
Carbon dioxide permeability	$S_D = 55 \text{ m}$	$S_D > 50 \text{ m}$	EN 1062-6
Water vapour permeability	$S_D = 0.5 \text{ m}$ (Class I)	Class I $S_D < 5 \text{ m}$ (permeable)	EN ISO 7783
Liquid water permeability and capillary absorption	$0.025 \text{ kg m}^{-2} \text{ h}^{-0.5}$	$w < 0.1 \text{ kg m}^{-2} \text{ h}^{-0.5}$	EN 1062-3
Freezing-thawing cycles (immersion in deicing salts)	1.43 N/mm^2	$\geq 0.8 \text{ N/mm}^2$	EN 13687-1
Bond strength	1.06 N/mm^2	$\geq 0.8 \text{ N/mm}^2$	EN 1542
Reaction to fire	A2	Euroclass	EN 13501-1

APPLICATION SPECIFICATIONS	VALUE
Application	Trowel or spray gun
Pot life	approx. 40 min
Thickness per coat	2 mm
Consumption	2 kg/m ² per mm of thickness
Temperature during application	+8°C min. / +30°C max.
Time interval before pool can be filled	5-7 days

SPECIFICATION

Pool finishing coat created by applying at least two coats of cement-based product blended with liquid resin, such as TECHNOKOLLA's KALOX-POOL, to obtain a total layer 4 mm thick. The mortar must conform to the requirements established by standard EN 1504-2. Once applied, the finish will be left exposed visually.

Technokolla reminds you to examine the “notes” document which completes the information in this data sheet. The document can be downloaded in the pdf format from the website www.technokolla.com.

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