



Safety data sheet

IPA Mörtel Kanal ph+ 1k

Status: 05.01.2024 Version: 1

Plastic-modified, cement-bound mortar for coating wastewater structures

Product description:

IPA Mörtel Kanal ph+ 1k is a dry mortar based on standard cements with increased sulphate resistance for the repair and coating of mineral building material surfaces. IPA Mörtel Kanal ph+ 1k consists of a powder component in accordance with DIN 18 557 and is only mixed with water.

IPA Mörtel Kanal ph+ 1k is a WW masonry, jointing, laying and repair mortar according to DIN 19573 and classified as WW coating mortar DIN 19573 - B2 - XWW3.

Areas of application:

IPA Mörtel Kanal ph+ 1k can be used on horizontal surfaces such as floors and vertical surfaces such as walls that are exposed to high mechanical and limited chemical loads. IPA Mörtel Kanal ph+ 1k can be used for both interior and exterior surfaces.

IPA Mortar Sewer ph+ 1k is used for coating septic tanks, sewers, clarifiers, retention basins, manholes, channels, septic tanks, sewage treatment plants, etc. The minimum layer thickness should be between 5 mm and 10 mm per application.

Mode of action/properties:

IPA Kanal ph+ 1k mortar can be applied by hand or by wet spraying; it is frost-resistant, impermeable to water, prevents the penetration of salts such as chlorides; its adhesion to load-bearing mineral substrates is very good and it is also capable of water vapor diffusion. IPA Mörtel Kanal ph+ 1k has a high mechanical load-bearing capacity, is chemically resistant up to pH = 5 and for a short time with sulphuric acid up to pH = 4. It can be used on damp substrates and is generally loadable after 2 days.

Shelf life:

Approx. 12 months if stored properly (+5-30°C; dry) in unopened original packaging

Processing instructions Substrates:

Concrete surfaces such as pipe walls, pool walls and floors, shaft walls and floors, tile channels, etc.
Preparation of the substrate: Cleaning the surfaces using cleaning methods such as shot blasting, high-pressure water blasting, compressed air blasting with solid abrasives, milling, flame blasting, etc. Remove all loose particles and binding substances such as oils, greases, coating residues, cement sinter layers down to the load-bearing substrate to ensure good adhesion. Recommended surface adhesive tensile strength 1.5 N / mm² Pre-treat oil-contaminated surfaces with IPA Oil Cleaner. Pre-wet the substrates with capillary



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saturated water. For surface coatings with IPA UNIMÖRTEL, IPA UNIMÖRTEL konz should be used as an adhesive slurry.

Notes:

For young concrete surfaces, allow an appropriate setting time, e.g. 14 days. Prevent cement slurries on the surface by brushing crosswise. Remove curing and demolding agents.

Substrate leveling:

Apply or level out imperfections and roughness depths in layers with IPA Mörtel Kanal ph+ 1k mortar. Recoating should only be carried out after the imperfections and roughness depths have completely hardened, but after 24 hours at the earliest.

Mixing process bonding bridge:

IPA LIQUID ph+ is mixed with IPA Mörtel Haftbrücke HB in the following ratio: 1 part by weight IPA LIQUID ph+: 2 parts by weight IPA Mörtel Haftbrücke HB, mixed homogeneously using a slow-speed stirrer.

Mixing process IPA MORTAR CHANNEL PH+ 1K:

Pour the mixing water into a clean mixing vessel and add the dry mortar component IPA Kanal ph+ 1k mortar (1 bag (25 kg) IPA Kanal ph+ 1k mortar and 2.90-3.40 kg water). Mix intensively and homogeneously for approx. 2 minutes using a compulsory mixer. After a maturing time of approx. 5 minutes, mix again for approx. 1 minute.

Processing:

The bonding slurry is first applied generously to the prepared surfaces using a brush or broom. The IPA Mörtel Kanal ph+ 1k is then applied fresh on fresh in an even layer thickness (5 - 10 mm), by hand or, on wall or ceiling surfaces, by spraying, compacted, smoothed and rubbed down to a smooth surface. The substrate temperature during application and 72 hours afterwards should be at least + 5° C, but not more than + 30° C, and the relative humidity should not exceed 80 %. The material temperature should be at least + 10°C and not exceed + 30°C. During application and for 72 hours afterwards, the surfaces must be protected from rain, wind and intense sunlight. The rules for processing cement-bound building materials apply.

Machine processing:



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Processing is possible with a screw pump, e.g. Mader Variojet or PFT N2V with a hose diameter of 35 mm (hose length > 20 m can be used), compressor air capacity min. 5 m³ / min.

Consumption:

approx. 2.0 kg IPA Mörtel Kanal ph+ 1k per mm and m²

Special notes:

At 20°C air, material and substrate temperature, IPA Mörtel Kanal ph+ 1k coatings can be exposed to water in ventilated rooms after 48 hours. If exposed to strong sun or wind, the surfaces must be protected from drying out for approx. 24 hours by covering. Protect from rain and frost. The rules for the post-treatment of cementitious building materials apply.

Cleaning and disposal:

The tools are cleaned with clean water. Delivery containers, material residues and mixing containers must be disposed of in accordance with official regulations. Disposal key in the hardened state:

LAGA-No. 314 09

EWC No. 17 01 01

Occupational safety:

Please wear protective clothing, safety goggles and protective gloves when working. Avoid heavy dust formation. Do not smoke, drink or eat during processing. In the event of skin contact and splashes in the eyes, rinse immediately with clean water for at least 15 minutes. It is recommended to have an eye wash bottle with a sterile solution ready to rinse eyes thoroughly. Then consult an ophthalmologist immediately. Please observe the safety data sheets and the regulations of the trade associations on handling cementitious materials.

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Technical data:

Delivery form	Powder
Color	Gray
Bulk weight/density	Approx. 1.80 g/cm ³
Largest grain	Up to 2.0 mm
Fresh mortar Bulk density	2.2 g/cm ³
Start of solidification	After approx. 120 minutes
Layer limitation	Max. 1 cm per layer
Sulphate resistance	≤ 0.8 mm/m no visible crack formation
Classification according to DIN 19573 Exposure classes	XWW3
Processing time	Approx. 50 minutes depending on temperature and humidity
Raw density	Solid mortar 2.1 kg/L
Shrinkage in mm/m	After 28 days = 1.1
Adhesive tensile strength on concrete	2.25 N/mm ² Fracture point in the mortar
Delivery form	25 kg bag

Strength in N/mm²

	Print	Bending train
1 day	9,8	3,5
7 days	32,5	8,0
28 days	53,0	13,5