IPA Bauchemische Produkte GmbH

A Stable Solution



IPA Mörtel Kanal ph+ 1k

Polymer modified mortar for coating of sewage constructions

Product description:

IPA Mörtel Kanal ph+ 1k is a 1-component mortar, based on standard cements, with high sulphate-resistance for repairing and coating of mineral substrates. The mortar may be applied vertically and horizontally on any kind of sewage constructions.

Application areas:

IPA Mörtel Kanal ph+ 1k may be applied on horizontal and vertical surfaces, which are subject to high mechanical and limited chemical exposure. IPA Mörtel Kanal ph+ 1k may be used on internal as well as on external surfaces. IPA Mörtel Kanal ph+ 1k is used for coating of fouling towers, sewers, clarifiers, storage basins, fennels, flumes, cesspools, sewage plants etc. The minimum layer thickness should be between 5 mm and 10 mm per application.

Mode of action (characteristics):

IPA Mörtel Kanal ph+ 1k may be worked manually or by wet spraying method; it is resistant against frost, it is waterproof and it prevents salt penetration such as chlorides; it has an excellent adhesion on sustainable surfaces and it allows water vapour diffusion.

IPA Mörtel Kanal ph+ 1k is mechanically highly resistant, chemically up to pH = 5,5 and it resists for short time against sulphuric acid up to pH = 4. It may be applied on humid surfaces and becomes usually resistant after 3 days.

Working instructions surfaces:

Concrete surfaces such as pipe walls, basin walls-and floors, sewer walls- and floors, chamfers etc. Surface preparation: surface cleaning with cleaning methods such as shot blasting, hydraulic blasting, compressed air blasting with solid blast agents, milling, flame blasting etc. Removal of all loose parts and adhesion-reducing material like oil, grease, coating residuals, cement interlayers up to the sustainable surface, in order to get a good adhesive compound. Recommended surface adhesive tensile strength 1,5 N/mm². Pre-treatment of oil contaminated surfaces with IPA Ölreiniger. Surfaces should be capillary wetness-saturated in advance.

Note:

New concrete surfaces require an appropriate setting time, e.g. 14 days. Avoid cement slurry on the surface by cross-wise besom strokes. Remove after treatment- and trimming agents.

Technical Data:

Delivery form:	Powder
Delivery form.	
Colour:	grey
	annray 1 90 g/cm³ annray
Apparent density/	approx. 1,80 g/cm³ approx.
Density	1,04 g/cm³
Max. grit size:	up to 2,0 mm
Fresh mortar	
Gross density	2,2 g/cm³
Beginning of	after approx. 40 minutes
solidification	
End of solidification	after 1,5 hours
Air inclusion content	in Vol. approx. 6%
Mix liquid need in weight	approx. 13 % of water
Working time approx.	40 minutes based on
	temperature and air
	humidity
Solid mortar	
Gross density	2,1kg/L
Strengths in N/mm ²	1 day 9,8 / 2,5
Compression/ bending	7 days 35,5 / 7,0
tensile strength	28 days 48,0 / 12,5
Shrinkage in mm/m	after 28 days = 0,8
Adhesive strength on	2,55N/mm², break in the
concrete	mortar
Delivery form	25 kg sack
Storage durability	approx. 12 months with
	appropriate storage (+5-
	30°C; dry) in unopened
	original packing
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IPA Mörtel Kanal ph+ 1k

Plastic-modified, cement-coated mortar for coating of sewage constructions

Surface levelling:

Level and/or apply layer by layer IPA Mörtel Kanal ph+ 1k - mortar on error spots and roughness depths. Reworking should be carried out only after complete hardening of the error spot- and/or roughness depth levelling, in any case not before 24 hours.

Mixing method adhesive layer:

(If mortar IPA Mörtel Kanal ph+1k is spray applied, the adhesive layer is not necessary)

Mix IPA Liquid with Ipa Mörtelhaftbrücke HB using the following mixing ratio:

Mix homogeneously 1 weight parts of IPA Liquid ph+ with 2 weight parts of Ipa Mörtelhaftbrücke HB with a slowly running mixer.

Mixing method IPA MÖRTEL KANAL PH+ 1K:

Fill plain water in a clean mixing container and add the dry mortar component IPA Mörtel Kanal ph+ 1k (1 sack (25 kg) IPA Mörtel Kanal ph+ 1k and 2,90-3,40 L of water. Mix thoroughly and homogenously 2 minutes with a forced mixer.

After a maturation time of approx. 5 minutes mix again for approx. 1 minute.

Treatment:

Surface should be damp with water, when slurry and mortar is applied. First apply the adhesion layer generously on the prepared surfaces using a brush or besom (only with application by hand). Then apply manually fresh in fresh the IPA Mörtel Kanal ph+ 1k in a even layer thickness (10 - 15 mm), or apply it with spray method in case of wall- or ceiling surfaces, densify, Trim and abrade it to a smooth surface. The surface temperature during and up to 72 hours after working should be at least + 5° C and not exceed + 30° C, relative air humidity should not exceed 80 %. Material temperature should be at least + 10°C und not exceed + 30°C. During and up to 72 hours after working surfaces must be protected from rain, wind and intense solar irradiation. Follow the norms for the treatment of cement-coated construction materials.

Consumption:

Approx. 2,0 kg IPA Mörtel Kanal ph+ 1k and approx. 0,26 kg of water per mm and m^2

Special instructions:

IPA Mörtel Kanal ph+ 1k - coatings may be exposed to water after 48 hours at 20°C air-, material- and surface temperature in ventilated rooms. In case of intense solar- or wind exposure surfaces must be protected from desiccation by means of covers. Protect from rain and frost. Follow the norms about after-treatment of cement-coated construction materials.

Cleaning and disposal:

Clean working tools with clean water. Delivery packages, material residuals, also mix containers must be disposed in accordance to the officially disposal norms. Disposal code in hardened condition: LAGA-no. 314 09 EWC-no. 17 01 01.

Safety at work:

During work please wear protection clothes, protection glasses and protection gloves. Don't smoke, eat or drink during the working process! In case of skin contact and splashes in the eyes immediately flush at least for 15 minutes with clean water.

It is recommended to keep ready an eye flushing bottle with a sterile solution in order to flush the eyes thoroughly. Afterwards immediately consult an oculist. Please respect the security data sheets and the norms of the professional associations about treating of cement coated materials.

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Our application-technical consulting may support in word and writing your own work. It is intended as not binding advice. Product descriptions don't contain any declarations about liabilities for eventual damages. However, in case of any liability for damages, it is limited to the mere value of the delivered and used wares. With these data sheet all previous technical data about the product become invalid. Specifications of our collaborators, which are not in line of this data sheet require a written confirmation.

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