

IPA DICHTSCHLÄMME KANAL ph+

Cement-based slurry with high sulphate-resistance

Product description:

IPA DICHTSCHLÄMME KANAL ph+ is a mineral cement-based waterproofing slurry with high sulphate-resistance.

Application areas:

IPA DICHTSCHLÄMME KANAL ph+ is designed for waterproofing of structures, in contact with soil, such as manholes, sewage collectors, concrete floors, sewers, water containers and reservoirs.

It's also suitable to seal against capillary water, soil humidity, pressured surface - and seeping water as well as positive or negative side waterproofing in new buildings and in the renovation of existent buildings.

Mode of action/characteristics

The hardened waterproofing slurry IPA DICHTSCHLÄMME KANAL ph+

- is impervious up to a water load of approx. 15 m.
- is particularly resistant against sulphate attack in compliance with DIN 4030
- is toxicologically harmless
- is compatible with potable water.
- has very good water vapour diffusion properties
- has a good adherence on mineral cement-compatible substrates.

Requirements:

Components to be coated or constructions should be and remain free of cracks and be sufficiently resistant. Components must not be deformable. IPA DICHTSCHLÄMME KANAL ph+ is not suitable for waterproofing on mixed masonry.

Substrate preparation:

Cleaning processes such as shot-blasting processes, compressed air blasting with solid blasting agents, milling, flame-blasting etc. are suitable. All loose parts and non-binding agents such as oils, grease, coating residuals, cement sinter layers must be removed up to the sustainable substrate in order to provide a good adhesive compound. Recommended substrate adhesive tensile strength 1,5 N/mm². Substrate must be capillary wet exceeding water has to be removed.

In case of new concrete substrates please maintain an adequate setting time, e.g. 28 days. Eventually avoid cement slurries on the concrete substrate by means of crosswise broom strokes. Remove any agents which could prevent good adhesion of further coatings.

Technical data:

| | | |
|--|---|--------------------------|
| Colour | dark-grey powder | |
| Material basis | cement-based | |
| Powder density | approx. 1,4 kg/dm ³ | |
| Mix liquid | clean water | |
| Mix liquid requirement | approx. 0,22-0,27 l/kg | |
| Processing time | approx. 2 hours (depending on temperature) | |
| Water impermeability | up to 15 m water column | |
| Days | Compressive-strength | Flexural strength |
| 2 Days | 14,0 N/ mm ² | 4,0 N/ mm ² |
| 7 Days | 26,0 N/ mm ² | 5,9 N/ mm ² |
| 28 Days | 26,0 N/ mm ² | 7,3 N/ mm ² |
| 90 Days | 40,5 N/ mm ² | 8,2 N/ mm ² |
| Adhesive strength | 2,7 N/ mm ² | |
| Mechanical resistance | excellent | |
| Chemical resistance | very good against sulphate attack up to ph 5,5 - 6 | |
| Resistance to UVA and UVB radiation | resistant because of cement based binder system | |
| Water vapour diffusion | μ (H ₂ O) = 58 | |
| Delivery form: | 25 kg-Sack | |
| Storage | in unopened, original packing in dry rooms | |
| Storage temperature | at+5°C at +30°C | |
| Durability | 12 months with appropriate storage | |
| Material consumption | approx. 3 - 4 kg/m ² with soil humidity and pressured water; approx. 4-5 kg/m ² with water under pressure | |
| Substrates: | All concrete substrates, masonry, cement plaster and floors and all Ipa repairing mortars. | |

IPA DICHTSCHLÄMME KANAL ph+

Cement-based slurry with high sulphate-resistance

Surface levelling:

Repair spalled parts and equalize uneven substrate depths with Ipa repair mortars like Unimörtel, Unimörtel Rapid, or Ipa Unimörtel conc Repair mortar. Close pores and small holes with IPA

DICHTSCHLÄMME KANAL ph+ under addition of silica sand. The placing of the next layer should not begin before complete setting on these preliminary repairs, anyway not before 2 days.

Mixing procedure:

Mix homogeneously IPA DICHTSCHLÄMME KANAL ph+ powder with clean water by means of a slowly running agitator. Begin to mix IPA DICHTSCHLÄMME KANAL ph+ only with very few water until the enclosed air has passed off. Only then the mix may be diluted with more water until obtaining a “creamy” consistency. The mixed material must be stiff enough not to drop off the slurry brush.

Application:

IPA DICHTSCHLÄMME KANAL ph+ may be applied by painting- or spraying method on prepared, well moistened substrates in two or three layers. Apply with constant layer thickness using 2 kg/m² of material per layer in order to avoid coating defects. The substrate temperature during working and 72 hours after should be at least 5°C, but not exceeding 30°C; the relative air humidity may not exceed 80%. The minimum material temperature should be 10°C and not exceed 30°C. Waiting time between two layers is 6–24 hours. The previously applied layer should be hardened enough so that no damage will be raised by application of the next layer. During the working process and 24 hours after, the surfaces must be protected against rain and intense solar irradiation.

Protection of the waterproofing:

The slurry waterproofing may be protected by suitable measures against mechanical damages, e.g. during the refilling of the excavation pit, driving on soil surfaces.

After treatment:

Special protection measures, e.g. covering with canvas covers, cloths etc. may be carried out with strong solar irradiation, rain- and frost impact. The after treatment may be carried out along to the norms of cement coated materials.

Cleaning and disposal:

The working tools are cleaned with clean water. Delivery packages, material residuals, also mix containers are to dispose in accordance to the official disposal norms.

Disposal code in hardened condition:

LAGA-no. 314 09 EWC-no. 17 01 01

Security advice:

During work please wear protection clothes, protection glasses and protection gloves. During the working process don't smoke, eat or drink! Avoid strong formation of dust. 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 a eye flushing bottle with a sterile solution in order to flush thoroughly. Afterwards immediately consult a oculist. Please respect the security data sheets and the norms of the professional associations about treating of cement coated materials.

Version 11/18

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.

IPA Bauchemische Produkte GmbH Riedhof 5 – 82544 Egling – Tel. 08171-9990600 – Fax 08171-99906020 – E-mail: info@IPA.de Internet: www.ipa.de oder www.ipanex.de