# **IPA Bauchemische Produkte GmbH**

A Stable Solution



# **IPA DICHTSCHLÄMME BHD**

# Cement-based slurry for high pressure waterproofing

#### **Product description:**

IPA DICHTSCHLÄMME BHD is a mineral cement-based waterproofing slurry with high sulphate-resistance

## **Application areas:**

IPA DICHTSCHLÄMME BHD 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, non-pressuring surface water and leachate as well as positive or negative waterproof-ing in new buildings and in the renovation of exis-tent buildings.

## Test certificate:

Hygiene Institut Gelsenkirchen, DVGW-Work Sheet W347 "hygienic requirements for cement-bound materials for drinking water supply"

## Mode of action/characteristics

The hardened waterproofing slurry IPA DICHTSCHLÄMME BHD

- is impervious up to a water load of approx. 7ba (70m Wc).
- is particularly resistant against sulphate at-tack in compliance with DIN 4030
- > is toxicologically harmless
- is compatible with potable water.
- > is highly water vapour breathable
- has a good adherence on mineral cementcompatible substrates.

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## Technical data:

Colour       grey powder         Material basis       cement-based         Powder density       approx. 1,35 kg/dm³         Mix liquid requirement       approx. 0,22 l/kg         Processing time       approx. 1 hour (depending on temperature)         Water impermeability       up to 70 m water column         Compressive- strength       Flexural strength         1 Day       48,0 N/ mm²       8,7 N/ mm²         28 Days       58,0 N/ mm²       8,7 N/ mm²         Adhesive strength       2,5 N/ mm²       excellent         Mechanical resistance       excellent       resistant because of cement based binder system         Water vapour diffusion       μ (H2O) = 58         Water vapour diffusion       μ (H2O) = 58         Storage       in the unopened, original packing in dry rooms.         Storage temperature       at+5°C at +30°C         Durability       12 months with appropriate storage         Material consumption       approx. 2 - 3 kg/m² with soil humidity and non-pressuring water; approx. 4-5 kg/m² with pressuring water	Technical data:				
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## 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 e 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. Recom-mended substrate adhesive tensile strength 1,5 N/mm<sup>2</sup>. 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 residues which could prevent good adhesion of fur-ther coatings.

## Surface levelling:

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

Close pores and small holes with IPA DICHTSCHLÄMME BHD under addition of silica sand. The next layer should not begin before com-plete setting of these preliminary repairs, anyway not before 2 days.

## Mixing procedure:

Mix homogeneously IPA DICHTSCHLÄMME BHD powder with clean water by means of a slowly run-ning agitator. Begin to mix IPA DICHTSCHLÄMME BHD 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" consis-tency. The mixed material must be stiff enough not to drop off the slurry brush.

## Application:

IPA DICHTSCHLÄMME BHD 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 mate-rial per layer in order to avoid coating defects. The substrate temperature during working process 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 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 suit-able 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. De-livery packages, material residuals, also mix con-tainers 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, protec-tion glasses and protection gloves. During the work-ing 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 solu-tion in order to flush thoroughly. Afterwards immedi-ately consult a oculist. Please respect the security data sheets and the norms of the professional as-sociations about treating of cement coated materi-als.

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.

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