### IPA Bauchemische Produkte GmbH

A Stable Solution



# IPA UNIMÖRTEL

High sulphate-resistant laying, coating, repair and sealing mortar according to DIN 19573 with accelerated or delayed setting behaviour (BTG version)

#### **Product description**

IPA UNIMÖRTEL is a single component, ready to use with water, early set polymer modified cementitious watertight repair mortar for horizontal, vertical and overhead repair and waterproofing of concrete and masonry. According to DIN 19573 IPA UNIMÖRTEL is classified as WW-coating mortar DIN 19573 - B2 - XWW3..

#### **Application areas**

Interior / exterior Structural concrete repairs, bridge decks, parking decks, walls, columns, above and below grade concrete, masonry and block from positive or negative side;

IPA UNIMÖRTEL is used

for coating of fouling towers, sewers, clarifiers, storage basins, fennels, flumes, cesspools, sewage plants etc

As water tight plaster For height adjustments of floors

#### **Test Report:s**

- TU München Nr. T21413 / 05-01- MPA BAU Material Testing Office for the Construction Industry, inspection of the water penetration depth of the sealing mortar "IPA Unimörtel", determination of flexural strength and compressive strength.
- Hygiene Institut Gelsenkirchen: tested according to DVGW-Worksheet W 347 "Hygienic requirements for cement-bound materials in drinking water"
- Determination of the resistance to sulphuric acid attack according to DIN 19573: 2016 VBE Association for Building Material Testing and Development

#### Mode of action/characteristics

#### IPA UNIMÖRTEL is

- Fast Curing, water bearing in 12 hours
- watertight
- Excellent workability results in labour savings
- · Good adhesion to substrate
- Tradesman use conventional practice
- set time 30 minutes dependant on temperature
- shrink compensated

#### **Technical Data**

Technical Data	
Material basis	cement-based
colour	concrete grey
Max aggregate-grain size	2 mm
apparent density approx.	1,59 kg/dm³
mix liquid	clean water
mix liquid demand	approx. 0,12 l/kg
working time	approx. 30 minutes (de-
	pending on temperature)
Depth of penetration by	≤ 50 % of minimum layer
water	thickness
Bonding strength	28 d > 2,0 N/mm <sup>2</sup>
Sulfate resistance	≤ 0,8 mm/m no visible
	cracks
Classification acc. to DIN	XWW3
19573 exposure to sulfu-	
ric acid	
Material consumption	Approx. 2,0 kg IPA
•	UNIMÖRTEL /m² and
	mm layer thickness
Fresh mortar character-	
istic data	
Gross density	2,09 g/cm <sup>3</sup>
Air pore content	10,8 Vol.%

#### Solid mortar characteristic data

Already little changes of the mix liquid quantities cause an acceleration or delay of the setting behaviour!

Compression strength

1 day	26,5 N/ mm²
7 days	45,1 N/ mm <sup>2</sup>
28 days	49,6 N/ mm²

Bending tensile strength

Bonaing tonoile outength	
1 day	4,1 N/ mm²
7 days	7,7 N/ mm²
28 days	8,2 N/ mm
Adhesion tensile	> 2,0 N/mm² Fracture in the
strength 7 days	concrete surface.
Delivery form	25 kg paper bag,
	42 bags on one pallet
Storage durability	approx. 12 months with
	appropriate storage (+5-
	30°C; dry) in unopened
	original packing

#### **IPA UNIMÖRTEL**

## Waterproofing and repairing mortar for concrete and masonry

#### Working instructions surface

Surface must be solid and free of adhesion-reducing agents. Eventually derust reinforced steel and coat with IPATOP MKH 1k. Surface must be moistened in advance in order to make it capillary saturated (surface dully humid). Remove ponding water.

#### **Treatment**

Mix IPA UNIMÖRTEL with clean water with a slowly running agitator homogeneously to a workable mortar (25 kg dry mortar, 3 l water). Apply the mortar with a suitable tool, density and abrade it. In case of big cavities use form works.

For area coatings use IPA Unimortel konz as an adhesion bridge.

Don't replasticize with water already firm mortar. During and up to 24 hours after working surfaceand material temperature must not be lower than +5°C. The norms for treating cement-coated construction material are applying.

#### Cleaning and disposal

Clean working tools and containers immediately after use with water. Don't pour residual quantities of mixed material in canalization.

#### Safety at work

During work please wear protection clothes, protection glasses and protection gloves. Avoid strong dust formation. 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 (available in pharmacy) 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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