

Status: 05.01.2024 Version: 1

# Mortar for repairs in damp areas

#### **Product description:**

IPA Unimörtel Rapid is a sulphate-resistant, fast-setting, low-shrinkage cement-based repair mortar for damp areas.

Safety data sheet

**Unimörtel Rapid** 

cement-based repair mortar for damp areas. IPA Unimörtel Rapid is a WW masonry, jointing, laying and repair mortar in accordance with DIN 19573 and is classified as a WW coating mortar DIN 19573 - B2 - XWW3.

#### **Areas of application:**

It is suitable for creating fillets, repairing defects on concrete parts or pipes, sewer shafts, sewage treatment plants etc. in damp areas, as well as for working on defects in masonry before surface sealing. Structural steel is not attacked as the material is chloride-free. IPA Unimörtel Rapid is impermeable to water.

#### Mode of action/properties:

-Adheres well to mineral substratesis highly sulphate-resistant

- -is fast setting
- -Does not attack mild steel (chloride free)
- -cures with low shrinkage
- -is impermeable to water
- is resistant to acids/alkalis up to pH 3.5 and up to 11.0; short-term 2.0 12.0
- -is free from chloride

#### **Processing instructions Substrate:**

Concrete surfaces, screeds, cement plasters and all concrete repair and restoration mortars.

#### Substrate preparation:

Cleaning the surfaces using cleaning methods such as: Shot blasting, water, sand or wet sand blasting, compressed air blasting with solid abrasives, milling, flame blasting, etc.

All loose parts and binding substances such as oils, greases, coating residues and cement sinter layers must be removed down to the load-bearing substrate to ensure good adhesion. Recommended surface adhesive tensile strength 1.5 N/mm2. Please pre-treat oil-contaminated surfaces with IPA oil cleaner. The surfaces must be pre-saturated with capillary water; standing water and water films must be avoided at all costs.

#### **Bonding slurry:**



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For better adhesion, a bonding slurry is prepared from IPA Unimörtel Rapid and clean water to a slurry consistency using an agitator. Ensure that the powder component is first stirred with a small amount of mixing water until the trapped air escapes. Only then is the mixture brought to a slurry consistency by adding more water. This bonding slurry is applied to the substrate with a tassel or brush to a thickness of approx. 1 - 3 mm, covering the entire surface

#### **Processing:**

IPA Unimörtel Rapid is mixed with clean water using a slow-running mixer. The powder component must first be mixed with a small amount of mixing water until the trapped air escapes. The mixture is then brought to a stiff-plastic consistency by adding more water. Using suitable tools, the mortar is now applied to the still adhesive bonding bridge, fresh in fresh, compacted and rubbed down if necessary. For greater filling depths, several layers must be applied. The substrate and material temperature must not fall below 5°C during application and for 24 hours afterwards. The rules for the application of cementitious building materials apply.

For special applications, IPA Unimörtel Rapid can be mixed with IPATOP LiQUID ph+. In this case, please consult our application technology department!

### **Follow-up treatment:**

IPA Unimörtel Rapid Aufmörtelungen must be protected from rapid drying out and from exposure to sunlight, rain and frost by suitable measures.

### **Cleaning and disposal:**

The tools are cleaned with clean water. Delivery containers, material residues, also. Mixing containers must be disposed of in accordance with official regulations. Disposal code in hardened state: LAGA-No. 314 09 EWC No. 17 01 01

#### Safety advice:

Please wear protective clothing, safety goggles and protective gloves when working. Do not smoke, drink or eat during processing! Avoid heavy dust formation. 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 regarding the handling of cementitious materials.



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# **Technical data:**

Material basis	Cement
Color	Concrete
Bulk density approx.	1.50 kd/dm <sup>3</sup>
Mixing liquid	Clean water or IPA LIQUID ph+
Mixing liquid requirement	approx. 0.15 l/kg
Processing time (depending on temperature)	Approx. 10min
Classification according to DIN 19573 Exposure	XWW3
classes	
Sulphate resistance	≤ 0.8 mm/m no visible cracking
Material consumption	Approx. 2.0 kg/m <sup>2</sup> /mm layer thickness

## **Compressive strength**

1 hour	2.2 N/mm <sup>2</sup>
3 hours	17.0 N/mm <sup>2</sup>
6 hours	36.0 N/mm <sup>2</sup>
24 hours	41.0 N/mm <sup>2</sup>
28 days	56.0 N/mm <sup>2</sup>

## Bending tensile strength

28 days	9.8 N/ mm <sup>2</sup>
Adhesive tensile strength	≥ 2.0 MPa
Consumption	2.0 kg/l mortar
Delivery form	20 kg plastic bucket
Storage	12 months if stored properly in the original unopened bucket, dry at +5°C
	+30°C