

### Gypsum mortar for masonry containing gypsum

Compressive strength according to EN 13279-2  $\geq 5$  N/mm<sup>2</sup>

- mortar development in the context of project 18320 of the German Federal Foundation for the Environment (DBU)
- sulphate-resistant
- colour: light grey

no picture

### APPLICATIONS

- for interior and exterior masonry work and grouting
- for producing masonry and grout mortar for renovating masonry containing sulphates
- traditional manual processing

### PROPERTIES

- based on the fundamental research carried out in the DBU project AZ 18320 "Optimising and testing permanent gypsum mortar"
- Water does not settle due to set water retention capacity
- weather and frost resistant after hardening
- driving rain-proof
- positive locking adhesive bond in the contact areas between mortar and bricks

### COMPOSITION

- mineral binder based on gypsum, special gypsum according to DIN EN 13279
- graded stone aggregates in accordance with DIN 13139
- special additives for regulating the setting time and improving the processing properties

### SUBSTRATE

<b>Suitable substrates</b>	<ul style="list-style-type: none"> <li>■ historic masonry with gypsum mortar</li> </ul>
<b>Properties/tests</b>	<ul style="list-style-type: none"> <li>■ Masonry and substrates must be firm, load-bearing, frost-free and free of adhesion-reducing residues.</li> <li>■ Joint flanks must be frost-free, dry, free of oil, paint, dust as well as soft and loose mortar residue.</li> </ul>
<b>Pretreatment</b>	<ul style="list-style-type: none"> <li>■ Before grouting masonry for the first time, the joint must be cleared out so deep that it equates to twice the joint width, but at least 2 cm.</li> <li>■ The joints are to be cleaned. The joint flanks must be dust-free and free of soft and loose mortar residue.</li> <li>■ The joints are to be pre-wet depending on their absorbency.</li> <li>■ When pre-treating the areas being worked on, the different absorbency levels of the materials is to be taken into account. The pre-treatment is to be adapted to the circumstances by observing the water absorbency capacity. For instance, it may be noticed that low-absorbent, dense stone (e.g. granite) does not need much water, whilst the mortar in the joint is very absorbent. If this is not sufficiently pre-wetted before grouting, too much water will be extracted from the newly introduced mortar. This leads to inadequate bonding strengths and reduced grouting strengths. This also applies to processing in several layers, due to grouting over a depth of 2 cm.</li> </ul>

### PROCESSING

<b>Temperature</b>	<ul style="list-style-type: none"> <li>Do not process or allow to dry out at air, material or substrate temperatures below +5°C, or if there is a risk of exposure to night frost, or at temperatures above +30°C, or in direct sunlight, or on heated up surfaces, and/or in windy conditions.</li> </ul>
<b>Mixing / Preparation / Processing</b>	<ul style="list-style-type: none"> <li>Mix product using suitable machine technology, e.g. compulsory or continuous mixer, or by hand.</li> <li>When machine-processing: Adjust the amount of water accordingly to obtain a workable consistency.</li> <li>When mixing manually, first place the quantity of water specified in the technical data in a clean container and then sprinkle in dry mortar. Use clean tap water.</li> <li>use a suitable agitator to mix the material until smooth and free of lumps. Leave to rest for a moment and then mix again, adding more water, if required, to achieve the right consistency for applying.</li> <li>consistency: earth-moist</li> <li>Do not mix with other products and/or other substances.</li> </ul>
<b>Processing</b>	<ul style="list-style-type: none"> <li><b>Brick laying:</b> <ul style="list-style-type: none"> <li>Apply mortar on the masonry in the required layer thickness with the trowel, set stones in place and skim off protruding mortar. Masonry joints must be flush-jointed.</li> <li>In the case of visible masonry, allow joints to stiffen and smooth with a jointing iron, hose or something similar. Then clean the masonry immediately.</li> </ul> </li> <li><b>Joints:</b> <ul style="list-style-type: none"> <li>When grouting for the first time, care is to be taken that the new grouting interlocks on the joint flanks.</li> <li>In special cases, e.g. boulder stonework, only smaller areas of masonry are to be chiselled out and grouted again immediately to prevent eruptions in the masonry areas.</li> </ul> </li> </ul>
<b>Processing / Working time</b>	<ul style="list-style-type: none"> <li>Approximately 1 hour</li> <li>The stated times apply for a temperature of +20°C and relative humidity of 65%.</li> <li>Mortar that has already started to harden must never be thinned down with additional water, remixed or applied.</li> </ul>
<b>Drying / Hardening</b>	<ul style="list-style-type: none"> <li>When planning the execution times, it should be taken into account that the temperatures on or in the masonry must not drop below +5°C. At times of the year when the possibility of a further drop in temperature must be assumed, work with the product must no longer be carried out.</li> <li>Protect the fresh mortar from drying out too quickly and from unfavourable weather conditions such as frost, draughts, direct sunlight and direct exposure to driving rain if necessary by hanging with foil.</li> </ul>
<b>Cleaning the tools</b>	<ul style="list-style-type: none"> <li>Clean all tools and equipment with water immediately after use.</li> </ul>

### PACKAGING

- 30 kg/sack

### STORAGE

- Store sacks appropriately and in dry conditions on pallets.

### QUANTITY REQUIRED / YIELD

- consumption: depending on application
- yield: app. 21 l fresh mortar per 30 kg/sack

# V5

## Gypsum mortar

### TECHNICAL DATA

<b>Binder base</b>	Binder according to patent no. PA 3437680
<b>Compressive strength</b>	(Proof according to EN 13279-2) $\geq 5$ N/mm <sup>2</sup>
<b>Grain</b>	0 – 4 mm
<b>Colour</b>	light grey

All data are average values which have been obtained under laboratory conditions in accordance with relevant test standards and application trials at +23°C and 50% relative humidity. Deviations are possible under practical conditions.

### SAFETY AND DISPOSAL INSTRUCTIONS

- Safety**
- This product produces an alkaline reaction when it comes into contact with moisture/water. Therefore ensure that skin and eyes are protected. If it should come into contact with the skin or eyes, rinse them thoroughly with water. See a doctor immediately if it comes into contact with the eyes.
  - Further information can be found in the safety data sheet at [www.tubag.de](http://www.tubag.de).

- Disposal**
- Dispose of the material in accordance with the official regulations.
  - Completely empty and recycle the packaging.
  - Dispose of hardened product in accordance with the local regulations. Do not allow to enter the sewer system. Dispose of the hardened product in the same way as concrete waste and slurries. Waste code according to the Ordinance on the European Waste Catalogue depending on the origin: 17 01 01 (concrete) or 10 13 14 (concretewaste and concrete slurries).

### GENERAL INFORMATION

This information sheet provides only general recommendations. Should you have any queries relating to a specific application, please contact our technical sales advisor or call our hotline: +49 541 601-601. Since natural raw materials are used, the values and properties described may vary somewhat. All of the details given are based on our current knowledge and experience and on the assumption that the materials are professionally applied and used for their normal purpose. All of the details are non-binding and do not release users from their duty to undertake their own tests to ensure suitability for the intended application. Due to the effects of different weather, processing and construction site conditions, no guarantee can be given for the general validity of all details. We reserve the right to make changes as a result of further development of the product and applications engineering. The general rules for construction engineering, the valid standards and guidelines, and the technical working guidelines must be observed. The publication of this technical data sheet renders all previous editions of this data sheet void. Please obtain the latest information from our website.