



PROPERTIES

Natural white binder concentrate for the preparation of modelling and laminating concrete

APPLICATIONS

Production of frost- and weather-resistant large-scale concrete objects using the build-up technique

Applicable for indoor and outdoor use.

COMPOSITION

Binder according to DIN EN 197, aggregates, admixtures

SUBSTRATE / FORMWORK

When concreting onto existing concrete, the substrate must be clean, load-bearing and dust-free.

For a good bond with the substrate, it is recommended to precoat the substrate with a cement slurry consisting of cement and water and to apply the fresh mortar on top of it wet in wet. The slurry should have approximately the consistency of wall paint.

If the substrate is not sufficiently rough, a cement slurry may be insufficient as a contact bridge. In this case, the substrate should be mechanically roughened beforehand or provided with a rough surface by applying a thin layer of KLEMO adhesive mortar.

PROCESSING

Working temperature

Do not apply at air, material and substrate temperatures below +5 °C and above +30 °C.

Working time

approx. 60 minutes (times refer to +20°C and 65% relative humidity.) Mortar that has already set may be slightly moistened again within this time, kneaded and further processed.

Mixing / Preparation

For the preparation of a usable dry mortar, the addition of gravel and cement is necessary. It is recommended to use a commercially available screed-concrete ready-mix, which already contains the components gravel and cement in the required mixing ratio. 20 kg of GRUMO XXS is then added to 80 kg of screed concrete to achieve optimum processing and strength properties. The following mixing options are available:

- 1) 20 kg GRUMO XXS + 80 kg screed concrete
- 2) 20 kg GRUMO XXS + 16 kg Portland cement + 64 kg screed gravel

Mix the dry mortar thus prepared with approx. 200 ml clean water per kg to a soft-plastic consistency. Rubber gloves must be worn when mixing and kneading by hand.

For modelling, the consistency of the mass must be approximately that of soft clay. For laminating, it must be even slightly softer. Even very small amounts of too much water can make the mass too soft and thus unusable for

processing in the desired technique. In this case, further dry mortar must be kneaded in until the consistency is ideally adjusted.

Up to 50 g of cement-compatible colour pigments can be added per kg of GRUMO XXS.

Application / Processing

The material is applied quickly immediately after mixing. In the case of multi-layer construction, a time interval of about one day must be observed between the layers and the substrate must be pre-wetted with cement slurry in each case.

By adding BUMS Universal Mortar Fast in any mixing ratio, a significantly faster setting and hardening can be achieved if required, which reduces the required time interval between two layers to a few hours or even a few minutes, depending on the dosage. In this way, a particularly speedy working method is possible.

Setting / Hardening

Protect from too rapid water extraction by sun, wind or draught.

Low temperatures delay, high temperatures accelerate solidification and hardening.

Tool cleaning

Clean tools and equipment with water immediately after use.

Other information

As a rule, no additives may be added.

However, the addition of BUMS Universal Mortar fast in any quantity to regulate the setting speed is permissible if required.

CONSUMPTION / YIELD

Consumption: approx. 0.45 kg/l

45 l wet mortar per 20 kg bag

TECHNICAL DATA

Processing temperature:	+5 °C to +30 °C
Working time at 23 °C:	approx. 60 minutes
Water requirement:	approx. 5 litres per 25 kg (based on total dry matter)
Yield:	approx. 45 litres of fresh mortar per 20 kg of GRUMO XXS
Mixing time:	approx. 1 minute
Compressive strength after 28 days:	≥ 35 N/mm ²
Flexural strength:	≥ 3 N/mm ²
Grain size:	flour fine
Hue:	natural white

DELIVERY FORM

20 kg bag

STORAGE

Store in a dry and appropriate place.

Can be stored for at least 12 months from the date of production in the sealed original container.

SAFETY INSTRUCTIONS

The product reacts strongly alkaline with moisture/water. Therefore protect eyes and skin. Wear rubber gloves when applying the product manually. In case of contact with skin, rinse with plenty of water. In case of eye contact, consult a doctor immediately. Observe further instructions in the safety data sheet.

GISCODE: ZP1 (cementitious products, low in chromate).

DISPOSAL

Dispose of in accordance with official regulations. Empty containers should be recycled. Material residues can be disposed of according to the Waste Catalogue Ordinance under waste code 17 01 01 (concrete) or 10 13 14 (concrete waste and concrete slurry).

GENERAL INSTRUCTIONS

The information in this leaflet only represents general recommendations. Should any questions arise in a specific application, please contact our responsible technical sales consultant or our online forum <https://betonsprechstunde.moertelshop.com>. Due to the use of natural raw materials, the stated values and properties may be subject to fluctuations. All information is based on our current knowledge and experience and refers to professional application and normal use. All information is non-binding and does not release the user from the obligation to check the suitability of the product for the intended use. A guarantee for the general validity of all information is excluded with regard to different weather, processing and object conditions. We reserve the right to make changes within the scope of further product and application technology developments. The general rules of construction technology, the applicable standards and guidelines as well as technical processing guidelines must be observed. With the publication of this technical data sheet, previous editions lose their validity. For the latest information, please refer to our website www.moertelshop.com.

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