

PROPERTIES

Refractory, light white casting concrete for temperatures up to 1600 °C

APPLICATIONS

Production of refractory castings with low weight and high temperature resistance

Applicable for indoor and outdoor use.

COMPOSITION

White calcium aluminate cement, aggregates, admixtures

SUBSTRATE / FORMWORK

The product is suitable for casting in moulds.

When casting in concrete moulds or casting moulds that are not made of silicone, use the mould release agent PLOPP or a comparable agent, preferably wax-based. No release agent is required for silicone moulds.

If water is removed from the concrete by capillary action, discolouration and sanding of the edges is to be expected. Therefore, care should be taken to ensure that the mould is sealed watertight in order to produce castings with defect-free edges. The use of MOLLYPUT kneading silicone is recommended for sealing and rounding off the inner edges of the casting mould.

VERARBEITUNG

Working temperature

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

Working time

approx. 30 minutes (times refer to +20°C and 65% relative humidity.) Mortar that has already set must not be diluted with additional water, mixed and further processed.

Mixing / Preparation

Mix the contents of the bag (20 kg) with approx. 5 litres of clean water to a flowable consistency. Mixing is facilitated if only 75 % of the dry mass and 100 % of the intended amount of water are initially added and mixed with a whisk until a flowable consistency is achieved. The remaining dry mass can then be added and stirred in.

A compulsory mixer is recommended for mixing larger quantities. The mixed mass can only be processed for approx. 30 minutes. Only mix as much material as can be applied consistently within the processing time. Up to 15 g of cement-compatible colour pigments can be added per kg of dry matter. When selecting the pigments, it should be noted that some colour shades change when fired. Chrome oxide green, iron oxide red, titanium dioxide white and ultramarine blue are colour-stable.

Application / Processing

The material is quickly poured into the mould immediately after mixing. Afterwards, the rising of remaining air bubbles from the mass can be supported by light tapping, poking or jerking, which is particularly recommended when pore-free visible surfaces are required.

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

No additives may be added.

The first firing should only take place after thorough drying and with a low temperature gradient. The workpiece should be at least 1 to 2 weeks old.

CONSUMPTION / YIELD

Consumption: approx. 1.5 kg/l

Yield: 13.6 I wet mortar per 20 kg bag

TECHNICAL DATA

Processing temperature: +5 °C to +30 °C

Working time at 23 °C: approx. 30 minutes

Water requirement: approx. 5 litres per 20 kg

Mixing time: approx. 2 minutes

Fire resistance: up to 1600 °C

Grain size: 0-0.5 mm

Hue: white

DELIVERY FORM

20 kg bag, 4 kg bag, 1.5 kg can

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.

Effective date: 6/12/2021, Version: 1.0 (replaces all previous versions)

