



PROPERTIES

Grey, flowable special cement for the preparation of high-strength concrete

APPLICATIONS

Production of frost- and weather-resistant castings with high demands on strength, edge stability and moulding accuracy

Applicable for indoor and outdoor use.

COMPOSITION

Portland cement, rock flour, micropuzzolan, superplasticizer

SUBSTRATE / FORMWORK

Concrete produced with CEM-FLUP 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.

PROCESSING

Working temperature

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

Working time

approx. 20 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 bag contents (25 kg) with the appropriate aggregate and max. 6.25 litres of clean water to a flowable consistency. It is recommended to use a compulsory mixer for larger quantities. The required mixing time is 2 to 5 minutes. Smaller quantities can be mixed with a whisk or free-flow mixer. Mixing is facilitated if only 75 % of the dry mass and 100 % of the intended amount of water are initially added and mixed until a flowable consistency is achieved. Afterwards, the remaining dry mass can be added and stirred in.

Only mix as much material as can be applied consistently within the working time.
The following standard recipes are recommended

1) Recipe A (fine): 1 kg CEM-FLUP 22 to 1100 g quartz sand grain size 0.1 - 0.4 mm and 210 g water (This gives 1 litre of concrete.)

2) Recipe B (medium): 1 kg CEM-FLUP 22 to 1500 g washed sand (air-dry, grain size 0 to 2 mm) and 230 g water (This produces 1.2 litres of concrete.)

3) Recipe C (coarse): 1 kg CEM-FLUP 22 to 2000 g Silimix 282 and 250 g water (This gives 1.4 litres of concrete.)

When using moist sand, it should be noted that it usually already contains between 25 and 100% of the total permissible amount of water. The amount of water added must then be reduced accordingly.

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 specific information

CONSUMPTION / YIELD

Consumption: approx. 700 to 1000 g per litre of fresh concrete

Yield: approx. 25 to 35 l fresh concrete per 25 kg bag

TECHNICAL DATA

Processing temperature:	+5 °C to +30 °C
Working time at 23 °C:	approx. 20 minutes
Water requirement:	max. 6.25 litres per 25 kg
Mixing time:	approx. 2 to 5 minutes
Grain size:	flour fine
Hue:	grey

DELIVERY FORM

25 kg bag, 5 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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