

SBM-HS

Sewer and manhole mortar HS



Civil engineering mortar with excellent sulphate resistance

Standard masonry mortar M25 acc. EN 998-2
NM IIIa according to DIN 20000-412

- according to test report from the IAB – Institute for Applied Building Research in Weimar, corresponds to the requirements of exposure class XWW3 according to DIN 19573
- high chemical resistance to aggressive wastewater, and particularly to sulphates
- recipe with original tubag trass



APPLICATIONS

- for new builds and the renovation of drain, sewer and manhole structures
- especially suitable for the production of sieve structures, sieve shafts and masonry sieve sections
- for masonry and bedding
- for repairing flaws

PROPERTIES

- high sulfate resistance
- high impermeability of the joint due to particularly favourable grain gradation of the aggregate and high adhesion to the stone
- with original tubag trass for an optimized hardening process
- high frost resistance
- weatherproof
- high stability due to special supporting grain
- good water retention capacity of the fresh mortar

COMPOSITION

- sulphate-resistant cement in accordance with DIN EN 197-1
- trass in accordance with DIN 51043
- graded stone aggregates in accordance with DIN 13139
- additives for regulating and improving workability and product properties

PROCESSING

Temperature	<ul style="list-style-type: none">■ 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.
Mixing / Preparation / Processing	<ul style="list-style-type: none">■ When machine-processing: Adjust the amount of water accordingly to obtain a workable consistency.■ Using a flow mixer, gravity mixer or compulsory mixer, mix the dry mortar with clean water for no longer than 2 to 3 minutes to achieve the correct consistency.■ 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.■ 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.■ Do not mix with other products and/or other substances.
Processing	<ul style="list-style-type: none">■ All horizontal and vertical joints are to be filled with mortar in a full and void-free manner.■ Mortar residue does not break off. They can be easily removed with a trowel.
Processing / Working time	<ul style="list-style-type: none">■ approx. 2 hours■ The stated times apply for a temperature of +20°C and relative humidity of 65%.■ Low temperatures prolong the processing time, high temperatures shorten it.■ Mortar that has already started to harden must never be thinned down with additional water, remixed or applied.
Drying / Hardening	<ul style="list-style-type: none">■ 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.
Cleaning the tools	<ul style="list-style-type: none">■ Clean all tools and equipment with water immediately after use.

PACKAGING

- 25 kg/sack
- loose in silo

STORAGE

- Store dry and as per instructions.

QUANTITY REQUIRED / YIELD

- consumption: approx. 45 kg/m² with NF K and RF K drain clinker
- yield: app. 15 l fresh mortar per 25 kg/sack

TECHNICAL DATA

Product type	Standard masonry mortar
Compressive strength class	M25 according to DIN EN 998-2
Mortar group	NM IIIa according to DIN 20000-412
Grain	0 – 2 mm, 0 – 4 mm
Water requirement	approx. 2,7 l per 25 kg/sack
Bond strength / Adhesive shear strength	≥ 0.15 N/mm ²
Chloride content	≤ 0.1 % by weight
Fire behaviour	A1 (non-flammable) in accordance with EN 13501
Water vapour permeability μ	15/35 (table value EN 1745)
Thermal conductivity $\lambda_{10,dry,mat.}$ for P=50%	≤ 0.82 W/(mK) (table value EN 1745)
Thermal conductivity $\lambda_{10,dry,mat.}$ for P=90%	≤ 0.89 W/(mK) (table value EN 1745)
Durability (frost resistance)	On the basis of available experience, suitable for highly aggressive environments in accordance with EN 998-2 Annex B

All data are average values that were determined under laboratory conditions according to relevant test standards and application tests. Deviations are possible under practical conditions.

SAFETY AND DISPOSAL INSTRUCTIONS

Safety	<ul style="list-style-type: none">■ 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.
GISCODE	<ul style="list-style-type: none">■ ZP1 (products containing cement, low-chromate)
Disposal	<ul style="list-style-type: none">■ 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. 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.