

PROTECT HFS-40 (DM)

Item No. 2545

Mass hydrophobization acc. to EN 934-2 with microstructure optimization properties

FIELDS OF APPLICATION

PROTECT HFS-40 (DM) is a highly efficient mass hydrophobization to produce high-quality manufactured concrete products with reduced water absorption. PROTECT HFS-40 (DM) is particularly suitable for manufactured concrete products for gardening/landscaping, paving stones, paving flags, bricks and curbs. The product can be used in the production of face or core concrete.

Concretes made with PROTECT HFS-40 (DM) can achieve the following benefits:

- Reduced capillary water absorption of the concrete
- Reduced total water absorption
- Increased durability of concrete
- Even mould filling
- Reduced sticking to the stamp
- Reduced efflorescence
- Improved resistance to freeze-thaw damages
- Improved compaction
- Good or optimised early strengths
- Improved visual appearance
- Contribution to sustainability due to the long-term performance of concrete

In addition, PROTECT HFS-40 (DM) produces a brilliant colour and is therefore particularly suitable for coloured manufactured concrete products.

DOSAGE

Recommended dosage range 1.0 – 2.0 mass-% of the cement content; is equivalent to 10 - 20 ml per kg cement.

WORKING PRINCIPLE

PROTECT HFS-40 (DM) reacts with the cement matrix during the setting process and thus develops its hydrophobic effect. Both the capillary water absorption and the total water absorption are significantly reduced. The water vapour permeability of the concrete is maintained.

TECHNICAL DATA

| | |
|--------------------|---|
| Homogeneity | homogenous |
| Colour | pink |
| State | liquid |
| Density | 1.00 ± 0.02 g/cm ³ |
| pH-value | 7.0 ± 1.0 |
| Workability | from +1 °C |
| Shelf life | approx. 1 year from date of production if stored properly |
| Storage Conditions | Store in unopened, original sealed packaging between +5 °C and +25 °C. Protect from frost and insolation. |

PROCESSING INDICATIONS

Agitation or circulation is recommended before the product is firstly used and after an undisturbed period.

PROTECT HFS-40 (DM) can be added either simultaneously with the mixing water or the ready-mixed concrete.

We recommend the use of a double diaphragm pump.

The mixing of the starting materials must continue until the mixture appears homogenous. In order for PROTECT HFS-40 (DM) to develop its full effect, a sufficient wet mixing time should be maintained.

If further admixtures are added to the concrete mix, compatibility tests are required before using PROTECT HFS-40 (DM).

Colour deviations due to changes in the binder, w/c value, etc. must be taken into account.

This product is not classified as hazardous according to the CLP regulations. See safety data sheet for further information.

PACKAGING

- 30 l can
- 200 l barrel
- 1000 l container

REMARKS

This information describes the application- and processing possibilities of a product and its operation principles under regular conditions. Having no influence on the further application and processing, especially in conjunction with other construction materials, the given indication is neither a warranty in respect of the product's properties or its fitness for a particular purpose nor a full instruction of use. This information, any other recommendation or verbal advice are not binding and do not infer to any liability or legal demand.

Due to continuous further development, the most recent Technical Data Sheet is valid and will be supplied on request. All orders are accepted subject to our current general terms and conditions.

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SUITABILITY- AND PRE-TESTS ARE NECESSARY BEFORE APPLYING THE CONCRETE ADMIXTURE!