

## PROTECT HWR-65 (DM)

Item No 2565

**High-value hydrophobic admixture for the manufactured concrete product industry**

### FIELDS OF APPLICATION

PROTECT HWR-65 (DM) is a highly effective hydrophobic admixture suitable for the production of manufactured concrete products with reduced water absorption.

The use of PROTECT HWR-65 (DM) reduces the risks of erosion damages like freeze-thawing salt damages or visual deficiently signs like effloresces significantly.

Consequently, PROTECT HWR-65 (DM) advances concrete's durability and long-term performance and can make a contribution to ecological sustainability therefore.

PROTECT HWR-65 (DM) generates a hydrophobic concrete structure. The product was especially developed for high value added manufactured concrete products in vibro-compaction and wet-cast production processes.

### DOSAGE

Recommended dosage range 0.5 – 2.0 mass-% of the cement content;  
is equivalent to 5 – 20 ml per kg cement.

### WORKING PRINCIPLE

PROTECT HWR-65 (DM) reacts with the cement matrix during the hydration process and generates a hydrophobic concrete texture thereby. This hydrophobic effect reduces the capillary suction and decreases concrete's water absorption abilities. Having these properties, the occurrence of efflorescence and frost damages are minimised.

### TECHNICAL DATA

Homogeneity	homogenous
Colour	white
State	liquid
Density	0.98 ± 0.02 g/cm <sup>3</sup>
pH value	8.5 ± 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

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

PROTECT HWR-65 (DM) should be added either contemporaneously with the tempering water or to the ready-mixed concrete batch.

The mixing time should be 60 seconds at least.

Using more than one admixture in the same concrete mixture requires suitability and preliminary tests in order to ensure the required combination of its effects is attained.

In order to ensure compatibility with other admixtures, pre-tests should be performed.

**Note: Changes in cement sort, water/cement ratio etc. might lead to colour variations in concrete.**

This product is classified as hazardous according to the CLP regulations. See safety data sheet for further information.

## PACKAGING

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

## REMARKS

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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!**