

## PROTECT HWA (ST)

Item No 2510

**Stabiliser acc. to EN 934-2 for producing hydrophobic concrete**

### FIELDS OF APPLICATION

PROTECT HWA (ST) is a stabiliser with hydrophobic effects for mineral-based building materials and especially suited for producing manufactured concrete products and coloured concrete precast elements.

PROTECT HWA (ST) generates a hydrophobic concrete structure during the production process. As a result, the water penetration in hardened concrete is minimised. Thereby the occurrence of efflorescence is reduced and the frost resistance is significantly improved.

Consequently, PROTECT HWA (ST) makes a contribution to producing durable and sustainable concrete.

PROTECT HWA (ST) stabilises concrete's texture, reduces segregation tendencies, improves concrete's compaction and attains a dense, homogeneous structure.

### DOSAGE

Recommended dosage range 1.0 – 4.0 mass-% of the cement content; is equivalent to 10 – 40 ml per kg cement.

### WORKING PRINCIPLE

PROTECT HWA (ST) 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.

PROTECT HWA (ST) maintains the water vapour transmission of concrete.

### TECHNICAL DATA

Homogeneity	homogenous
Colour	milky
State	liquid
Density	0.99 ± 0.02 g/cm <sup>3</sup>
pH-value	7.5 ± 1
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 HWA (ST) 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.

The hydrophobic effect advances with the proceeding hydration process and reaches its full effect after 28 days.

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 not 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 are 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!**