

ANTIFROST 45 (BE)

Item No 0559

Chloride-free hardening accelerator acc. to DIN EN 932-4 and antifreeze admixture

FIELDS OF APPLICATION

ANTIFROST 45 (BE) is an accelerating admixture for concrete, especially developed to increase the hydration process at low, ambient and curing temperatures.

The accelerator supports concrete hardening at early ages and is suitable for all concrete applications where high early strength development is a key success factor or is of crucial importance.

These challenges are usually associated within the following uses:

- Ready-mix concrete
- Slipform concrete
- Precast & manufactured concrete products
- Industrial flooring
- Winter concreting

ANTIFROST 45 (BE) minimises the occurrence of shrinking cracks during the initial setting time.

DOSAGE

Recommended dosage range 0.2 – 5.0 mass-% of the cement content.

The ambient temperature has to be taken into account. Subsequently the recommended dosage is:

Dosage in dependence to temperature

Temperature	Dosage range
+5 °C to 0 °C	0.25 – 0.5 M.-%
0 °C to -5 °C	0.75 – 1.0 M.-%
-5 °C to -10 °C	≥ 1.0 M.-%

The dosage quantity has to be determined for each application. Pre-tests are required.

WORKING PRINCIPLE

ANTIFROST 45 (BE) accelerates the setting and the initial strength of concrete. Concrete's final strength is not negatively influenced.

SPECIAL INDICATIONS

Under cold weather conditions (below +5 °C) the usual winter arrangements e.g., heating the mixing water and the concrete aggregates are necessary.

TECHNICAL DATA

Homogeneity	homogenous
Colour	colourless
State	liquid
Density	1.43 ± 0.03 g/cm ³
pH-value	5.5 ± 1
Chloride content	< 0.10 mass-%
Alkali content (Na ₂ O equivalent)	< 0.5 mass-%
Workability	from - 15 °C
Shelf life	approx. 1 year from date of production if stored properly
Storage conditions	Store in unopened, original sealed packaging between - 15 °C and +25 °C. Protect from frost and insolation.

PROCESSING INDICATIONS

ANTIFROST 45 (BE) should be added to the ready-mixed concrete.

The mixing time must comply with the regulations defined in EN 206-1 and DIN EN 1045-2.

This product is 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
- loose by bulk supply

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 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!