

# ANTIFROST 45

Item No. 0560

**Non-chloride accelerating and anti-freeze admixture for reinforced concrete**

## Fields of Application

ANTIFROST 45 accelerates the initial and final setting of concrete, mortar and screed. By using ANTIFROST 45 high early strengths can be achieved, which allow an early stripping of form work. Simultaneously the concrete ought to have the necessary strength to withstand freezing during the early stages.

ANTIFROST 45 is particularly suited for pouring and processing concrete under frosty weather conditions.

ANTIFROST 45 protects steel reinforced concrete including precast and prestressed concrete against chloride induced corrosion.

## Dosage

Recommended dosage range 0.5 – 2.0 mass-%; equals 3.5 – 14 ml per kg cement.

## Working Principle

ANTIFROST 45 accelerates the cement hydration and optimises its heat development. During its initial setting time ANTIFROST 45 minimises the occurrence of shrinking cracks.

## Technical Data

Steadiness	homogenous
Colour	transparent
Active substances	calciumnitrate
State	liquid
Density	1.43 ± 0.03 g/cm <sup>3</sup>
pH-value	5.5 ± 1
Chloride content	< 0.10 mass-%
Alkali content as Na <sub>2</sub> O - equivalent	< 1.0 mass-%
Workability	below -1°C
Durability	approx. 1 year
Storage	In closed containers cool but frost-free. Protect from intense solar radiation!

### Processing Hints

ANTIFROST 45 is either to be added into the mixing water or upon the ready mixed concrete. An adequate mixing time should be kept.

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

The admixture is not a harmful substance according to the EC directives, regulations on harmful substances, and forwarding instructions. Generally accepted safety precautions must be taken when handling chemicals. The corresponding EC material safety data sheet is available upon request.

### Type of Delivery

30 l can  
200 l barrel  
1000 l container  
loose by bulk supply

### Remarks

The products we produce and process are subject to a stringent factory control.

Due to steady improvements on our products and numerous fields of application our details of information are not binding. Any liability thereof cannot be accepted. In the case of application problems we are pleased to offer our help.

BEFORE USING THE PRODUCT SUITABILITY TESTS ARE ALWAYS REQUIRED.