

**Chloride free concrete hardening accelerator for concrete work during cold seasons**

**Antifreeze Agent MO 3**

Art. – No. 30.221.

**APPLICATION AREA:**

Used for the production of unreinforced concrete for winter application under ambient temperature between 5 to -10°C.

**CHARACTERISTIC:**

Antifreeze Agent MO 3 leads to an acceleration of the hydration of the cement and therefore the hardening of the concrete. Antifreeze Agent MO 3 is chloride free.

Antifreeze Agent MO 3 enables

- The necessary compression strength of the concrete (in excess of 5 N/mm<sup>2</sup>) for frost protection within a short period of time.
- The production of flowing concrete and a smooth application with the concrete pump.

**TECHNICAL SPECIFICATIONS:**

Basic raw materials:	Nitrate
Colour:	transparent
Form:	liquid
pH – value:	6 ± 1
Density (with 20 °C):	1.43 ± 0,03 g/ml
Chloride content:	≤ 0.10 M-%
Alkali content:	≤ 8.5 M-% (as Na <sub>2</sub> O-equivalent)
Fresh concrete temperature:	above + 5 °C
Shelf life:	c. 12 months
Storage:	Store away from direct sunlight and frost. Protect from impurities

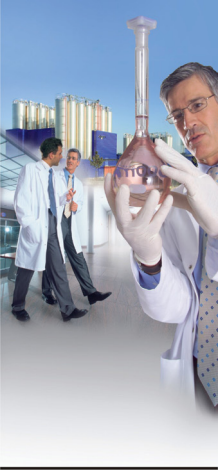
**DOSAGE:**

Recommended dosage: 0.2 – 3.0 M-% to cement weight

The necessary quantity of additive is based on the required concrete properties and must be established based on an initial test in accordance with BS EN 206-1.



# TECHNICAL DATA SHEET



## PROCESSING INFORMATION:

- Antifreeze Agent MO 3 should be added either simultaneously with the mixing water or last of all.
- Generally ensure sufficient mixing time.
- Do not use frozen aggregates and do not concrete frozen reinforcements and shuttering
- Fresh concrete temperature when applying the shuttering – at least + 5° C
- Protect the freshly applied concrete from any rapid loss of moisture or heat, until a compression strength of at least 5 N/mm<sup>2</sup> has been reached (initiate winter construction measures)

## WORK SAFETY:

- Subject to labelling „Xi“ irritant (R 36/37/38: Irritating to eyes, respiratory system and skin.)
- Not hazardous goods as defined by transport regulations
- WHC 1 (self assessment) little risk of pollution
- Please refer to the safety data sheet

## FORM OF DELIVERY:

35 kg PVC can - gfn  
240 kg Poly drum gfn  
1200 kg Container net  
Tanker delivery upon request

## NOTE:

Always observe general work hygiene when using our products. The raw materials we process and the products we produce are subject to strict factory inspections. We reserve the right to make changes that signify a technical advance. All the information applies to the normal case scenario, and has been given to the best of our knowledge. We cannot be held legally liable as a result of the information included in this leaflet. It is stressed that our products and the procedure must be tested for suitability with your circumstances.

EFFECTIVE: 09/11