

Technical Data Sheet KNOPP GMBH CHEMISCHE PRODUKTE

D-97337 Dettelbach Tel: +49(0)9324/9199-0 Fax: +49(0)9324/9199-66 info@knopp-chemie.com

# **CONTOPP®**

Frost-Ex MO 3

#### **Function**

- CONTOPP® Frost-Ex MO 3 leads to an acceleration of the hydration of the cement and therefore the hardening of the concrete.
- The necessary compression strength of the concrete (in excess of 5 N/mm²) for frost protection will be obtained within a short period of time.

# **Application area**

- Used for the production of unreinforced mortar for winter application under ambient temperature between 5 to -10°C.
- For producing bonded screeds and floating screeds in accordance with BS 8204-1
- For producing screeds on underfloor heating.
- For damp or outside areas.

#### **Data**

Basic raw materials: Nitrate

Colour: Whitish-cloudy Density (20 °C):  $1.45 \pm 0.01 \text{ g/ml}$ 

Form: Liquid

Fresh mortar temperature: above + 5 °C

Shelf life: ca. 12 months – protect from frost and direct sunlight

Storage: PE-HD-can: 24 kg netto

Poly-drum: 240 kg netto Container: 1.200 kg netto

## **Dosage**

Temperature	MO 3 per 50 kgs cement
0 to -5°C	0.40 kg
-5 to -8°C	0.80 kg
-8 to -10 °C	1.00 kg

Required amount of admixture according to requirements, base material and construction site conditions following BS 8204-1 and BS EN 13813.

# **Basic material**

- OPC or blends following BS EN 197.
- Aggregates following BS EN 13139.

## **Processing information:**

- CONTOPP® Frost-Ex 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 shutting
- 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/mm² has been reached (initiate winter construction measures)

## **Health & 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

# **PROPERTIES**

Article number: 30.411

# TECHNICAL DATA

# PROCESSING INFORMATION

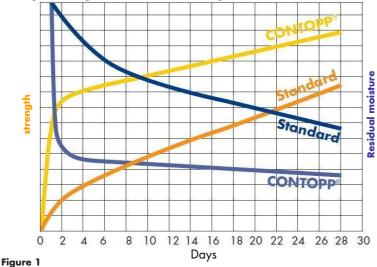
# GENERAL INFORMATION



# Technical Data Sheet

- WHC 1 (self assessment) little risk of pollution
- Please refer to the safety data sheet

# Compatibility with CONTOPP® products



 By combining CONTOPP® Frost-Ex MO3 with other products of the CONTOPP® range, properties like drying course, strength and processing are positively influenced (fig. 1).

## Standards and testing regulations

- BS 8204: In-situ floorings bases and screeds
- BS 8000: Code of practice for cement/sand floor screeds and concrete floor toppings
- BS EN 13813: Screed material and floor screeds
- BS EN 13139: Aggregates for mortar
- BS EN 197: Cement Part 1: Composition, specifications and conformity criteria for common cements

## **Comments**

The raw materials we process and the products we produce are subject to strict factory inspections. Do not use products from other manufacturers when using this product. It is stressed that our products and the procedure must be tested for suitability for the expected construction site conditions. The quality of screeds is essentially influenced by the quality of sand and cement, the mixing rates and the processing in accordance with approved screeding technology. Upon the publication all other previous copies shall become invalid.

**Stand** 01.01.20

# GENERAL INFORMATION