

# BETOPHOB (DM)

Efflorescence reducing agent with water-repelling effect according to EN 934-2:T9

## Industrial use

Product No.: 290037000

## Product Information:

### Sustainability Assessment:

Reducing the water-cement ratio and increasing the durability of the concrete

### Properties:

- special combination of substances
- high impermeability
- capillary-poor structure
- reduces the tendency to efflorescence and organic growth
- improves the frost resistance
- does not influence the water-vapour permeability

### Application:

for face concrete in the vibro-compacting process

Acts as a water-repellent concrete liquefier for building materials that contain mineral binders. The additive is economical to use and easy to use and process.

Efficiently lowering the clinker factor makes it possible to reduce CO<sub>2</sub> emissions.

A reduction in the clinker factor in cement from 0.73 to 0.5 means a reduction of > 200 kg/CO<sub>2</sub> per tonne of cement (calculation basis = approx. 750 kg to 800 kg CO<sub>2</sub> per tonne of clinker).

It is added as the last component to the finished mixture.

The full water-repellent effect is available when the products have completely reacted.

Do not use to manufacture elements that are intended for applications under permanent hydrostatic pressure (e.g. underwater applications).

The required mixing time after addition depends on the mixer and must be sufficiently measured. Unnecessarily long mixing times should be avoided as the effectiveness of the additive is reduced.

It is added as the last component to the finished mixture so that the hydrophobic effect does not interfere with the hydration process. Preliminary tests for determining the optimum dosage are necessary.

### Dosage:

0.3 - 1.8 wt.% of the binding agent content

The quantity to use depends on the required effect, cement grade and type of the concrete. Please call us for technical advice.

Prior to use, a suitability test according to EN 206-1 or any applicable standards or norms relevant in your country is required. If used together with other concrete admixtures, a compatibility test is imperative. Do not expose to the sun during application. Immediately upon use the container has to be closed to avoid pollution of the material with alkali-containing materials like lime or cement. The product is supplied ready for use.

### Specifications:

Appearance:	liquid
Colour:	white
Density:	0.99 ± 0.02 g/ml

**Storage:**

Under normal storage conditions (closed container, 20 °C) minimum shelf-life 12 months  
Protect from frost, direct sunlight and contamination.  
The storage temperature must not exceed 35 °C. If stored for > 2 months, stir before use.

**Packaging:**

Containers 1000 l, Drum 200 l, Canisters 20 l  
Other delivery quantities on request

**Safety Rules:**

See EC safety data sheet.

The product should only be used with suitable protective gloves (EN 374) and safety goggles (EN 166).

When used, ensure good ventilation (5 to 15 air exchange per hour).

**Assistance:**

Please contact our Technical Application Centre.

**Industrial use:**

Recommended frequency and duration of use:

480 minutes/day

200 days/year

**Environmental Exposure:**

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or the sewage system.