



## Bi-Mix Antifreeze

### Liquid Mortar Additive Resistance to Frost

**Bi-Mix Antifreeze** is a liquid mortar admixture that accelerates the hydration of the cement, shortens the set time and provides resistance to frost.

#### Areas of Use

It is used for protection of concrete and mortar against frost in winter, for concrete pouring up to -10°C temperature, where concrete and mortar should be installed early.

#### Technical specifications

View	: Liquid
Color	: Light coffee
Density	: 1.25 ± 0.03 gr/ml.
pH	: 6.5 ± 0.5
Viscosity	: 100 mPas (23°C).
Chloride	: No

#### Specification

- **Bi-Mix Antifreeze**, the reaction of cement with water in fresh concrete accelerates the formation of aluminate and silicate gellants in the first and final result. It accelerates the hydration of fresh concrete and allows the concrete to harden and gain strength rapidly. Therefore, under cold weather conditions (below 0°C) concrete is free from the danger of freezing in concrete casting.
- **Bi-Mix Antifreeze** shortens the hardening period of cement like other alkali additives, increases the strength of concrete in the first days. However, it does not show a decrease in later strength values and total pressure strength.
- **Bi-Mix Antifreeze** is more active than chlorinated additive in the same concentration when it does not contain chlorine. The structure is not affected by corrosive effects. In addition, thanks to a fast outlet, it is possible to save time in places that are thought to be taken early and also to provide economics due to the decrease in application temperature and duration.
- **Bi-Mix Antifreeze** provides some water reduction due to its fluidity in fresh concrete. Resistance increases with decreasing water cause, and resistance to frost increases.
- Increase the workability of fresh concrete in prefabricated and precast concrete works..

**Attention:** **Bi-Mix Antifreeze** should be allowed to settle at room temperature when frozen in packages below -10°C. You can mix the resolved material thoroughly and use it again.

**Note:** Concrete spilled using **Bi-Mix Antifreeze** must be protected with wicker, nylon, straw, sack or thermal insulation materials. .

#### Application

The recommended amount of admixture for **Bi-Mix Antifreeze** is 2% of the weight of the cement. This ratio varies between 1% and 3% depending on the operating conditions and the desired duration of the socket. It is recommended to use fresh and pure portland cement. In addition, the dosage should not be lower than 300 kg / m<sup>3</sup> (6 bags cement). Mixing water is reduced by the amount of **Bi-Mix Antifreeze** to be used. **Bi-Mix Antifreeze** is added to this mortar mixed water.

**Attention:** In the case of concrete casting in low air temperatures, it is necessary to take the measures recommended in the standards. Measures to prevent curing and frost must be met. Mortar mixing water, heating aggregates and molds, heat insulation of concrete surfaces and molds etc. it is ensured that the final result of the process is that the internal heat of concrete is at least +5°C the environment necessary for cement hardening should be created.

### **Consumption**

Depending on the amount of cement in the mortar, the cement is mixed with 1 - 3% of the dry weight.

### **Storage**

It can be stored for a long time in closed and original packaging (minimum -10°C and maximum +90°C).

### **Packing**

20,00 kg