



Very
High
Durability
Reinforced
Concretes



Certified Quality System since **FEBRUARY 1993**

From Project to Jobsite

ANTI GI-10

ANTI-FREEZE FREE OF CHLORIDES

CE approved – Certificate n. 1305 - CPD - 0017
EN 934-2 T7

Description ANTI GI-10 is an additive in powder, without chlorides, which interacts with the cement in an chemical-physical process to accelerate the hydration of the cement and the exothermal reactions.

Advantages

- creates the possibility to pour concrete in winter time with low temperatures
- Increases the hardening process of the concrete, so that demoulding can be done faster
- the generation of the initial strength protects the concrete from frost damage.
- Better internal cohesion of the concrete avoid segregation.

Fields of use ANTI GI-10 can be used in all types of concrete : normal, reinforced, prefabricated, prestressed.

Dosage/Method of use ANTI GI-10 is used in concentrations of 1 to 3 % on the cement weight, and is added together with the mixing water .

Remarks The product protect concrete against frost damage within certain reasonable limits:

- below 0°C in the mass of the concrete there will be no setting or hardening of cement (no hydration)
- below 0°C, the water shall start to freeze and increase 10% in volume
- if these phenomena occur during the initial phase of the curing of the concrete, this will result in cracking, separation between aggregates and cement, reduction on mechanical strengths, and disintegration.
- The best anti-freeze additives (like ANTI GI-10) will decrease the freezing point of the concrete by 2 to 4°C maximum.
- Therefore is advisable to apply the standard procedures for concrete, and the protection of concrete and assure that the internal temperature of the concrete shall always be above 5°C.

- Use always high class cement (42,5 – 52,5)
- Use high concentrations of cement
- Reduce the water/cement ratio (we recommend the use of our TECNOS® 95)
- Apply the concrete at the warmest time of the day
- Protect the concrete with isolating material
- The iced aggregates need to be defrosted before use

Do not forget that : to raise the temperature of concrete by 1 °C

- The aggregates must be 2°C warmer
- The water 4°C warmer
- The cement 8°C warmer.

Remark : with our special mortar BS 40 M6 MuCis® it is possible to apply with fast demoulding time, to temperatures of -16°C. Check the data sheet and contact our Technical department.



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Packaging Bag of 20 kg
Big-bag of 500 kg

Storage The product can be kept for at least 1 year if stored in dry and protected conditions, in the original unopened packaging, at temperatures between +1 °C and + 35 °C.

Specifications ANTI GI-10 meets the essential requirements according to EN 934-2 Normative, Classification T7 according to CE marking for Concrete Admixtures. Furthermore, its own performances meet and exceed the limits imposed by all the specifications concerning the concrete technology.

Safety indications Read carefully the safety indications on the packaging, or consult the relevant safety data sheet of this product.

The above information is based on our best experiences and lab results and on results of the application of the product in various fields. Tecnochem Italiana is not responsible for negative performances due to not proper use of the product or for defects due to elements not connected with the quality of the product included wrong storage. Technical characteristic in this technical data sheet are up-to-dated periodically .Revision date of this technical data sheet is indicated below.

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