

**CHEMICAL CONSTRUCTION- ANTIFREEZE FOR NON-REINFORCED CONCRETE AFC-102****Product description:**

Antifreeze 102 is a very active and effective chloride-based product with the least harmful substances for concrete. The presence of this compound in concrete causes the hydration of concrete to be done at a higher speed in the cold season, and therefore not only the setting of concrete will be accelerated, but also the resistance of concrete will increase, especially in the early stages.

Application:

Antifreeze 102 reduces the freezing point of concrete and prevents the freezing of water in the concrete body. Facilitates the hydration of concrete (even at low temperatures). Anti-freeze 102 reduces water consumption and increases the strength of concrete.

As an antifreeze in the cold season for concreting types:

- Unreinforced concrete prefabricated parts
- Types of unreinforced concrete structures
- Types of concrete structures exposed to wear

Environmental Conditions:

There are no special environmental conditions,

but if the temperature is lower than -15, it does not work properly, and humidity also does not affect the use of this product.

Technical data:

Specification	Details	EN Standard	ASTM Standard
Appearance	Clear	Visual Inspection	Visual Inspection
Density	52 °C (temp 0. 7-0.9 gr/cm ³)	Density	Density



packing: 5 kg (bag) - 25 kg (bag)

Surface Preparation:

The work surface must be free of any dust and fat particles.

Method of Applying: Add 1-5% of the weight of cement used to concrete during construction. It is also possible to add this material to the truck mixer before using concrete, but in this case, the amount of water used must be reduced to the amount of water to cement in the mixing plan. The consumption of antifreeze 102 depends on the ambient temperature, grade of cement and characteristics of the cement used. But for initial guidance in starting the tests, the following table can be used:

Temperature range	amount of antifreeze consumption in percentage of cement weight		
	300 carat	350 carat	400 carat
0 to -5	2.5%	2%	1.5%
-5to-10	5.3%	3%	2%
-10 to -15	5%	4%	3%

The amount of antifreeze 102 depends on the ambient temperature, the amount of cement used per cubic meter of concrete, the quality of the cement, the grading of sand and the thickness of the concrete. In normal conditions, for every 100 kg of cement up to the temperature of -2 degrees Celsius, 1.5 liters and for lower temperatures, half a liter of antifreeze is added for every 2 degrees Celsius.

Safety Tips:

This product is water-based and non-flammable. However, it is recommended that in case of skin contact, wash it with soap and large amounts of water and consult a doctor in case of skin sensitivity and irritation.

Storage Conditions:

This product should be kept in covered environments, in the original packaging and at a temperature of -15 to -25 degrees Celsius. Under the above conditions, 12 months from the date of delivery.

Considerations:

The available information is based on our technical knowledge and laboratory research, but since the conditions and methods of application are different and out of reach, we do not guarantee the results of it.

LEGAL NOTES : The information contained in this Technical Data Sheet is based on laboratory testing and practical experience. Actual performance may vary depending on substrate condition, application method, and environmental conditions. Users should test suitability before large-scale application.

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