



COLMEF®
BUILDING BETTER

Termogel

TECHNOLOGICAL ANTIFREEZE ADMIXTURE, CHLORIDE-FREE, FOR PREPARING CONCRETE AND MORTARS EVEN AT TEMPERATURES BELOW 0 °C. ACCELERATES SETTING AND HARDENING THROUGH AN EXOTHERMIC MASS REACTION.



TECHNICAL DATA SHEET - REVISION 01/2023

DESCRIPTION

TERMOGEL is a technological antifreeze admixture based on accelerators that allows concrete to be cast at temperatures below 0 °C. TERMOGEL reduces the initial and final setting times of cement, increasing the heat of hydration and lowering the freezing point of the mixing water. TERMOGEL contains no chlorides and is therefore particularly suitable for all works where the use of chloride-based admixtures could pose a corrosion risk to reinforcement. TERMOGEL is available in both POWDER and LIQUID versions.

FIELDS OF APPLICATION

TERMOGEL is used for preparing cast-in-place concrete and filling mortars when very cold ambient temperatures are expected, even below 0 °C.

APPLICATION

Mix preparation with TERMOGEL POWDER:

pour TERMOGEL Powder into the container holding the dry cement-aggregate mix and mix until it is perfectly dispersed throughout the mass. Add the required water and mix until a homogeneous, lump-free paste is obtained.

Mix preparation with TERMOGEL LIQUID:

add TERMOGEL Liquid together with the mixing water to the container holding the dry cement-aggregate mix and mix until a homogeneous, lump-free paste is obtained.

Regardless of the TERMOGEL version selected, Portland cement class 42.5 is preferable and thin-layer casting should be avoided. TERMOGEL allows mortars and concrete to be prepared in very cold ambient temperatures, but does not replace normal cold-weather practices. It is therefore necessary to check the concrete temperature (it must not be below +5 °C), ensure that no ice is present during mix preparation, keep the water-cement ratio as low as possible and slightly extend mixing times, also taking into account the outside temperature expected during the 24 hours following the pour.

Cast concrete during the warmest hours of the day and protect exposed surfaces with paper or jute sacks to retain the heat of hydration within the mass.

COVERAGE

TERMOGEL POWDER: 1-2 kg per 100 kg of cement.

TERMOGEL LIQUID: 2 kg per 100 kg of cement.

RECOMMENDATIONS

- ◆ After prolonged storage, mix TERMOGEL LIQUID thoroughly before use.
- ◆ TERMOGEL POWDER is sensitive to moisture.
- ◆ Store the product at temperatures above +5 °C.

- ◆ Wash all equipment used to prepare and apply the product with water before it hardens. After setting, the mortar can only be removed mechanically.

PACKAGING

TERMOGEL POWDER is supplied in 1 kg plastic bags, packed 25 per box.

TERMOGEL LIQUID is supplied in 1 kg plastic bottles, packed 25 per box, and in 6 kg plastic jerry cans on 540 kg pallets. Store the product in dry areas in its original tightly sealed packaging. Under these conditions, its shelf life is at least 12 months.

SAFETY INSTRUCTIONS

TERMOGEL is an alkaline irritant product. Avoid contact with skin and eyes. In case of eye contact, rinse immediately and thoroughly with water and seek medical attention. Wear protective gloves and goggles. For more information on safe use of the product, refer to the relevant Safety Data Sheet.

SPECIFICATION ITEM

TERMOGEL POWDER:

chloride-free powder antifreeze admixture, TERMOGEL by Colmef Srl, for preparing concrete and mortars even at temperatures below 0 °C, to be added to the dry cement-aggregate mix at a rate of 1-2 kg per 100 kg of cement.

TERMOGEL LIQUID:

chloride-free liquid antifreeze admixture, TERMOGEL by Colmef Srl, for preparing concrete and mortars even at temperatures below 0 °C, to be added with the mixing water to the dry cement-aggregate mix at a rate of 2 kg per 100 kg of cement.

TECHNICAL DATA

	TERMOGEL POWDER	TERMOGEL LIQUID
Appearance:	powder	liquid
Color:	white	yellow-brown
Specific gravity (g/cm ³):	0,85	1,28
Mixing ratio:	1-2 kg per 100 kg of cement	2 kg per 100 kg of cement
Flammability:	no	no

DATA MEASURED AT +23 °C - 50% R.H. AND NO VENTILATION

The information and recommendations above are based on our best experience. However, we cannot accept responsibility for improper use of the products. Users should therefore verify the product's suitability for the intended application and carry out preliminary tests. Always refer to the latest updated version of the technical data sheet, available at www.colmef.com.

FOR FURTHER INFORMATION OR SPECIAL USES, CONTACT COLMEF TECHNICAL ASSISTANCE SERVICE.

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