

ERGOMIX 4000

Polycarboxylate-based superplasticizer with hybrid side-chains for a wide range of precast concrete applications



The material

ERGOMIX 4000 is a superplasticizer with a special chemical composition formulated to prepare concrete with W/C ratio, optimum mechanical strength under different curing regimes and good workability over time.

ERGOMIX 4000 significantly reduces the negative effect on concrete performance caused by traditional acrylic additives, sometimes affected by the type of cement used;

ERGOMIX 4,000 is composed of polyethyleneoxide (PEO)-based chains of different length: Long chains are intended to increase cement particle dispersion due to the well-known steric hindrance effect and the mechanical strength of fast curing. On the other hand, the molar ratio of short chains with the carboxyl groups of main chain play a key role in maintaining concrete mix workability.

ERGOMIX 4000 is used to prepare high quality exposed concrete with an optimal reology. In addition, reduced porosity and easy vibration significantly reduce surface bubbles improving the aesthetic quality of concrete works.

Properties

Designed to be used with different weather conditions, ERGOMIX 4000 is used to:

- prepare concrete with low W/C ratio having no negative effect on workability and rheological properties;
- obtain optimum performance, independently from the type of cement used;
- prepare high performance concrete even in case of fast curing;
- reduce steam curing cycles;
- make concrete works with outstanding aesthetic appeal.

Field of application

Normally used for preparation and placing on site of:

- ordinary reinforced concrete and prestressed reinforced concrete;
- self-compacting concrete;
- high-strength concrete.

Yield

The amount used varies from 0.4% to 1.4% V/P (0.4 -1.4 litres per 100 kg concrete).

Recommendations for use

For delivering maximum concrete yield, pour ERGOMIX 4000 only after water content has been totally added.



In accordance with Standard
EN 934-2 T3.1-3.2.
Free from chlorides.

Storage

Store product tightly in a dry place, at a temperature between +5 °C and +35 °C.

DATA SHEET

Chemical-physical specifications:

Density (g/cc): 1,070 ± 0,020
 pH: 4,5 ± 1
 Chlorides (Cl⁻): none
 In accordance with Standard
 UNI EN 934-2 T 3.1.-3.2



Indicative composition:

Modified polyacrylate and technological additives in aqueous solution.

Product use:

Superplasticizer for a wide range of precast concrete applications, suitable for making concrete with low W/C ratio, optimum mechanical strength under different curing regimes and good workability.

Packaging:

210 litre drums
 In bulk
 1,000 litre tanks

Code

0101672030
 0101672010
 0101672050

Dosage rate:

0.4 ± 1.4% V/P (0.4 -1.4 liters per
 100 kg of cement)

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Our company has obtained the ISO 9001:2008 certification from ICM Q and Certiquality for: "Design, production and commercialization of special and chemical products for the building industry". Our quality system is based on catalogue sales and constitutes a contractual instrument between our company and customers. With the aforesaid contractual instrument Ruredil guarantees that the product which constitutes the subject matter of the supply is in compliance with the chemical-physical specifications indicated in the present catalogue data sheet. This type of sale releases the manufacturer from issuing analysis certificates which only guarantee the specific performance of the supply itself.

Second edition 07/2016. This edition cancels and replaces all previous editions. The safety data sheet and technical specifications may be downloaded from www.ruredil.it. The information contained in this technical info sheet is based on our knowledge and experience, and cannot be considered to represent a guarantee on our part, or an acceptance of responsibility for use of our products, as conditions of use are beyond our control.

