



CRYSTALLIZING ADMIXTURE FOR WATERPROOF CONCRETE.









## **PRODUCT DESCRIPTION**

Isocrystal is a powder admixture made from special hydrophilic components which, when added to a concrete mix, reduces the permeability of hardened concrete.

- · tunnels;
- · marine structures;
- · basements and foundations;
- · swimming pools;
- · precast elements;
- · "white tanks"

### FIELD OF APPLICATION

Isocrystal may be used with any type of concrete when a reduction of permeability is required. Once Isocrystal is added to the mix, it reacts with water during the entire service life of the concrete. Isocrystal may be used to make concrete that is resistant to aggressive environments. The specified exposure class of the concrete must always be respected and the product cannot be used to make up for poorly designed concrete. To have guaranteed results, Isocrystal must only be used in concrete that has been correctly designed respecting two basic rules for the production of impermeable concrete, which are, a water/cement ratio of 0.45 and an adequate wet curing time. Isocrystal may be successfully used to produce concrete for the following applications:

- · dams;
- · bridges;
- · car parks;
- · storage tanks;
- · pipes and piles;
- · retaining walls;

### **CHARACTERISTICS**

Isocrystal is a mixture of active compounds which, in the presence of water, transform the by-products of the cement hydration into crystals reducing concrete porosity and mico-cracks. Isocrystal reduces the permeability characteristics of concrete. Laboratory tests have shown that adding Isocrystal to concrete reduces its level of capillary absorption and makes it more resistant to the hydrostatic pressure. The crack bridging ability of Isocrystal allows to close microcracks up to 0.4 mm.

# **APPLICATION PROCEDURE**

Isocrystal should be added with the aggregates and in any case before adding the super plasticizer.



### **DOSAGE**

The recommended dosage rate for Isocrystal is 1-3 kg/100 kg of cementitious materials.

# **PACKAKING**

Isocrystal is supplied in: - 25 kg paper bag.

### SHELF LIFE-STORAGE

Original sealed packaging of this product is guaranteed to be of first quality for 60 months if stored in a dry area. The high humidity will reduce the shelf life of the bagged product.

# **SAFETY INSTRUCTION**

ISOCRYSTAL is not considered dangerous according to the current regulation regarding the classification of mixtures. It is recommended to wear gloves and goggles and to take the usual precautions taken for the handling of chemicals. For further and complete information about the safe use of our product please refer to the latest version of our Material Safety Data Sheet. PRODUCT FOR PROFESSIONAL USF

TECHNICAL DATA	
Product identity	
Appearance	Powder
Color	Grey
Density	2.2 kg/Lt at +20°C
Alkali content (equivalent Na <sub>2</sub> O) according to EN 480-12 (%):	≤ 23%
Chlorides soluble in water according to EN 480-10 (%)	< 0.1

#### WARNING

Danger. Contains Portland Cement: Chromium VI < 2 ppm within the validity period of the product. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H335 May cause respiratory irritation. P261 Avoid breathing dust. P280 Wear protective gloves/protective clothing/eye protection/face protection. P302 + P352 IF IN CONTACT WITH YOUR SKIN: Wash with plenty of water/... P305 + P351 + P338 IF IN CONTACT WITH YOUR EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/doctor/...



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