



Very  
High  
Durability  
Reinforced  
Concretes



Certified Quality System since **FEBRUARY 1993**

*From Project to Jobsite*

## PLASTARD® 18 PJ

**RETARDER OF THE INITIAL SETTING TIME OF CONCRETE  
WITH FLUIDIZING FUNCTION AND INCREMENT OF THE FINAL STRENGTHS**

**CE approved – Certificate n. 1305 - CPD - 0017  
EN 934-2 T8**

**Description** PLASTARD® 18 PJ is based on particular polysaccharides in water solution. The product is used like very effective retarder of setting time in concrete in general. In case of particularly special or sophisticated Mix Designs, it could be useful to profit from the maximum reactivity with the particular cement and with other additives used in the particular Mix Design.

PLASTARD® 18 PJ is an integral retarder which increases the workability of concrete and retards its initial setting time starting from few hours to some days, this depending on the dosage used. The dosage rate/retardation can be exactly matched depending on particular needing. The mechanical characteristics of the hardened concrete are always better than the concrete without retarder.

- Advantages**
- Particularly recommended the use of retarder PLASTARD® 18 PJ together with the superplasticizer Tecnos® azur CB/ER PJ2 to obtain optimal rheodynamic effect also with particularly low water/cement ratio and with possible workability times up to 120 minutes and more.
  - In function of the used dosage, retardation of the setting can be obtained from 1 to 48 hours without affecting the final quality of the concrete.
  - When PLASTARD® 18 PJ is used as it is, up to 12% less water is required for the same workability. This provides an increment of mechanical strengths up to 20%, better waterproofing, durability, adhesion to the metal reinforcement, and better chemical resistance.
  - Excellent performances in hot and dry climates
  - PLASTARD® 18 PJ does not introduce additional air into the concrete.

**Fields of use** The performance of PLASTARD® 18 PJ logically depends on the type of cement, the environment temperature and humidity and the working/mixing procedures.

Therefore it is advisable to perform as first some tests with the same ingredients and at the same conditions, in order to establish the amount of retarder in function of the desired result. It is also important to provide perfect curing to the retarded concrete, mainly in hot and dry/windy conditions, so that only a minimum part of the hydration water will evaporate.

PLASTARD® 18 PJ is especially advised for following applications :

- Wherever it is desired to schedule the workability and setting time, in function of specific and particular operative conditions.
- Where it is required to have an exceptional long setting time and workability of the concrete
- In hot and dry areas, with high temperatures of all the ingredients, and with long transportation periods of the concrete.
- In cases of continuing casting to decrease the number of joints.
- In case of high volume concrete applications where the structural continuity and a reduction of the temperature in the muer part of the concrete is necessary.
- In combination with the superplasticizers of the Tecnos® and Tecnos® azur ranges in order to increase the workability time in hot climates and with low water/cement ratio. Recommended together with the superplasticizer Tecnos® azur CB/ER PJ2.



Very  
High  
Durability  
Reinforced  
Concretes



Certified Quality System since **FEBRUARY 1993**

## *From Project to Jobsite*

---

- Method of use** PLASTARD® 18 PJ is a liquid, which is supplied ready for use, and can be added together with the water when the mixing of concrete is started.
- Packaging** In bulk  
Can of 25 Kg  
Drum of 220 kg  
IBC of 1000 kg
- Storage** If kept between 1 °C and 35 °C, the product can be stored for at least 1 year in its original packaging. The product stays liquid at temperatures above 0 °C. In case of freezing heat and remix the product.
- Dosage** 100-600 gr PLASTARD® 18 PJ for 100 kg cement, depending on the particular conditions of use and of the expected performances. Higher dosages to be used in case of programmed longer setting time.
- Effect of overdosage** Over-dosage of the product can lead to a more fluid mix, more entrained air, and consequently a serious reduction in mechanical performance, combined with extreme long hardening time. In serious cases, the demoulding of the concrete can become problematic. Nevertheless, in some cases the mechanical resistance was better or higher than the unmodified concrete. It is important that the retarded concrete shall not lose too much water by evaporation during the hardening process.
- Specifications** PLASTARD® 18 PJ meets the essential requirements according to EN 934-2 Normative, Classification T8 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.
- Compatibility** PLASTARD® 18 PJ is compatible with the additives of Tecnos®, Tecnos® azur and XARLON® ranges, and other Tecnochem admixtures.  
Recommended together with the superplasticizer Tecnos® azur CB/ER PJ2.  
In any case, consult our Technical Department.
- 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.

Edition: 04/2009  
Date revision : 12/2011

Nr. rev. : 3

PLASTARD® 18 PJ  
pag. 2/2