

PENTAFLW PC 6

Retarding superplasticizing agent for ready-to-use mixtures

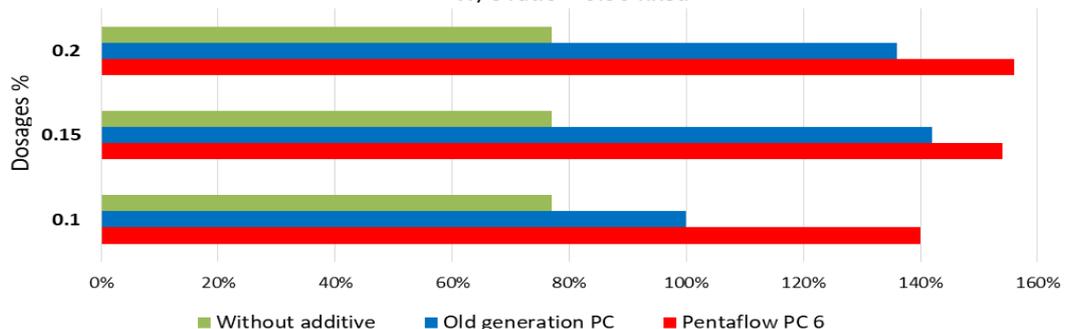
Technical Data Sheet December 2019

DESCRIPTION **Pentaflow PC 6** is a superplasticizing agent in powder form based on polycarboxylate dispersants. It improves the working time of mortars and micro concretes as well as their waterproofness, their resistance, and their durability.
Pentaflow PC 6 is also successfully used in the dispersion of fine and extra fine powders and micro-nano-sized products in the preparation of pastes and in aqueous dispersion systems and gypsum-based plasters.

FEATURES **Pentaflow PC 6** is a state-of-the-art additive. It fluidifies the mortars and allows maintaining the initial workability for a long time without affecting the development of the resistances at low seasoning.
 Thanks to its dispersing capacity of the fine particles and of the binders, it improves the workability and the laying of the mixture, by making concrete and mortars more plastic and workable, more cohesive, and easier to be sprayed.
 Concretes and self-levelling mortars obtained with the adding of **Pentaflow PC 6** do not show any segregation or bleeding phenomena. The reduction of the W/C ratio lowers the porosity and capillarity of the mixture. Thus, concretes have a better waterproofness and a better durability, as well as a more beautiful appearance and lower shrinkage.

USE Thanks to its features of stability and quick solubility, **Pentaflow PC 6** is suggested for cement-based mixtures and ready mix dry micro concretes.
 In the admixtures with high content in cement and Water/Cement ratio > 0.45, we suggest to combine it with the anti-shrinkage agent Pentamix EX 3.
 It is particularly suitable for the spraying of self-compacting conglomerates with the correct granulometry.
Pentaflow PC 6 is successfully employed also in water-based paints and in gypsum-based mortars. When used in ceramic gypsum, we suggest to use it together with the defoamer Antifoam PS 5.

Fluidifying capacity of Pentaflow PC 6 compared to an old generation polycarboxylate at different dosages (test performed on a standard mortar with W/C ratio = 0.50 fixed)



| | Data | Method | |
|-----------------------|------------------------------|-------------------------------|------------|
| TECHNICAL DATA | Chemical composition: | Polycarboxylate polymer | |
| | State: | Powder | Visual |
| | Colour: | Beige | Visual |
| | Density: | Max. 0.400 Kg/dm ³ | IST. 10.06 |
| | Granulometry: | Min. 95.0 % < 0.300 mm | IST. 10.09 |
| | Content in chlorine: | Max. 0.05% | |
| | Humidity: | Max. 4.0 % | IST. 10.04 |
| | Water solubility: | Total | IST. 10.21 |
| | Temperature of use: | > 0°C | IST. 10.08 |

DOSAGE

In premixed dry mortars, the recommended range of dosage is 0.05 - 0.5% on the weight of the mixture, depending on the desired degree of fluidization.

In micro concretes and wet mortars, the dosage of **Pentaflow PC 6** is normally 0.2 - 0.6% on the weight of cement.

Pentaflow PC 6 should be preferably added to the mixture immediately after adding the first mixing water in order to modify the consistency at will. **Different dosages can be used depending on the needs only after experimental determination.**

STORAGE AND VALIDITY

If it is stored in a dry place and in the original bags kept perfectly closed at temperatures lower than 50°C, **Pentaflow PC 6** has a 12 months validity starting with the date on the delivery note.

Should moisture be absorbed by the product, this does not affect its efficaciousness, but it makes its dosage difficult and it can cause a non-homogeneous distribution in the finished mixture. It is therefore advisable to close the bags carefully after each collection.

PRECAUTIONS

Pentaflow PC 6 is harmless in contact with skin.

It is easily removable from any surface with water and soap.

Inhalation can cause an irritation of the first part of the respiratory tract. This trouble disappears immediately when the handling of the product stops. It is therefore advisable to use dust masks and to avoid its dispersion in the environment. In case of accidental loss, it must be picked up in the dry state and discharged in an authorised waste dump.

PACKAGING

25 kgs paper bags.

The specifications stated in this report have been got either through standardized tests and rules or their modifications following Pentachem systems. The methods applied can be requested to our technical service.

All the data stated in this technical sheet are based on our knowledge and experience. However, before using the item differently from indicated, it is advisable to carry out preventive tests. In any case, PENTACHEM does not assume any responsibility for any damage or defect caused by the use of our products, as the employment conditions are not under our control. We also inform that our technical service is at our customers' disposal for any information concerning the correct employment of our products.