



PENTA EC 05

Cellulose Ether for low-viscosity systems

Technical Data Sheet, December 2015

DESCRIPTION

PENTA EC 05 is low-viscosity cellulose ether quickly soluble both in alkaline and acid systems.

It improves the smoothness and the easiness of application of all cement-based mixtures and avoids sedimentation in self-levelling systems.

It is suitable for stabilizing and increasing viscosity in resin-based systems in aqueous dispersion.

FEATURES

The easiness of solubility of **Penta EC 05** in aqueous systems or in dispersion in a solvent makes it usable in the production of all kind paints.

Its use is recommended in the formulation of thin-layer self-levelling products both latex-based and not.

Penta EC 05 improves the stability of dispersed solid particles so avoiding agglomerating during long-time storage.

The low viscosity, together with good water retention, allows obtaining fluid mortars free from sedimentation and water paints which are easily applicable, smooth-running and with excellent yield.

The addition of **Penta EC 05** is recommended in the formulation of cement-based paints in powder form where it improves all applicative features.

TECHNICAL DATA

	Data	Method
Composition	Methyl hydroxyalkyl modified cellulose	
State:	Powder	Visual
Colour:	Ivory-white	Visual
Bulk density	0.390 ± 0.050 kg/dm ³	IST. 10.07
Granulometry	Min. 95% < 0.180 mm	IST. 10.09
Humidity	Max. 4,0%	IST. 10.04
Water solubility:	Totally soluble	IST. 10.21
Water retention	Min. 55 % after 8 minutes	IST. 10.08

Features of the liquid solution

Surface activity	Weak
pH 20°C (1% solution):	7 ± 0.1
Viscosity at 20°C	Around 500 mPa.s (2% solution Brookfield LV)

DOSAGE

The normal dosage of **Penta EC 05** in water paints is 0.4-1.0 % on the dry mixture depending on the needed final characteristics. Anyway, it is advisable to carry out preliminary tests on the specific mixtures, to establish the optimal dosage in accordance with the required features.

STORAGE AND VALIDITY

Penta EC 05 has a 12 months validity starting from the delivery date, if it is stored in a dry place and in the original bags kept perfectly closed. Should moisture be absorbed by the product, this does not affect its efficaciousness, but it makes its dosage difficult and the distribution in the finished mixture not homogeneous. It is therefore advisable to close bags carefully after each collection.

PRECAUTIONS

Penta EC 05 is normally harmless by contact with the skin and is easily removable with water and soap. Inhalation can cause a slight irritation of the first part of the respiratory tract, so it is advisable to use a dust mask. In case of accidental loss, it must be picked up in the dry state and discharged in an authorised waste dump. Dry-clean the surfaces avoiding the use of water: it makes surfaces slimy and dangerous.

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.