

# PENTA EC 20

Cellulose ether

Technical Data Sheet October 2015

**DESCRIPTION** **PENTA EC 20** is cellulose ether quickly soluble in water both in a neutral and alkaline system. This feature makes it usable in the preparation of both cement and lime based plasters and gypsum-based plasters. It modifies their rheology by improving viscosity and water retention.

**USE** The quick development of viscosity of **PENTA EC 20** both in a neutral and alkaline system makes it suitable for cement and gypsum-based plasters and smooth finish mixtures applicable by machine. It is especially suitable for formulas containing crushed aggregates requiring long workability time and good smooth running. It is excellent for the production of high quality water paints. The surface modification of the product allows obtaining wet mixtures that are highly plastic and thixotropic but in the meanwhile easy to apply. The excellent water retention allows a long workability time without lessening the wet adhesion to the support and eliminates the irritating surface peeling.

## TECHNICAL DATA

	Data	Method
<b>Chemical composition:</b>	Hydroxypropyl methylcellulose	
<b>State:</b>	Powder	Visivo
<b>Colour:</b>	Beige-white	Visivo
<b>Bulk density:</b>	0,400 ± 0,100 kg/dm <sup>3</sup>	IST. 10.07
<b>Granulometry:</b>	Min. 95% < 0,300 mm	IST. 10.09
<b>Humidity:</b>	Max. 4,0%	IST. 10.04
<b>Water solubility:</b>	totally soluble	IST. 10.21
<b>Water retention :</b>	min. 60 % after 8 minutes	IST. 10.08

## Features of the

## Water solution:

<b>Surface activity :</b>	weak
<b>Viscosity at 20° C :</b>	18.000 ÷ 23.000 mPa.s (solution 2% Brookfield RV )

Cement based				Gypsum based			Water paints	
Plasters	Finishes	Adhesives	Masonry mortars	Plasters	Finishes	Putties	Interior	Exterior
								



Possible use



Recommended use

**DOSAGE**

The recommended dosage of **PENTA EC 20** in cement and lime-based plasters is 0.05÷0.15% and in gypsum-based plasters 0.15 ÷ 0.25% of the dry mixture, depending on the expected final features.

For other uses, dosages may be different from indicated, but it is advisable to carry out preliminary tests on the specific mixtures, including any other additives.

**STORAGE AND VALIDITY**

**PENTA EC 20** has 12 months validity from delivery note issue 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 20** is normally harmless in contact with skin and easily removable with water and soap. In case of contact with eyes it causes them to redden, but the trouble disappears by washing them with running water.

Inhalation can cause a slight irritation of the first part of the respiratory tract, so it is advisable to use dust masks.

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

For further information please refer to the Safety Data Sheet

**PACKAGING**

25-kilo 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.