

PENTAMIX EX 4

Shrinkage reducing agent

Technical Data Sheet, October 2015

DESCRIPTION Pentamix EX 4 is a shrinkage reducing admixture for cement based dry mortar and in particular for grouts and self-levelling mortars.

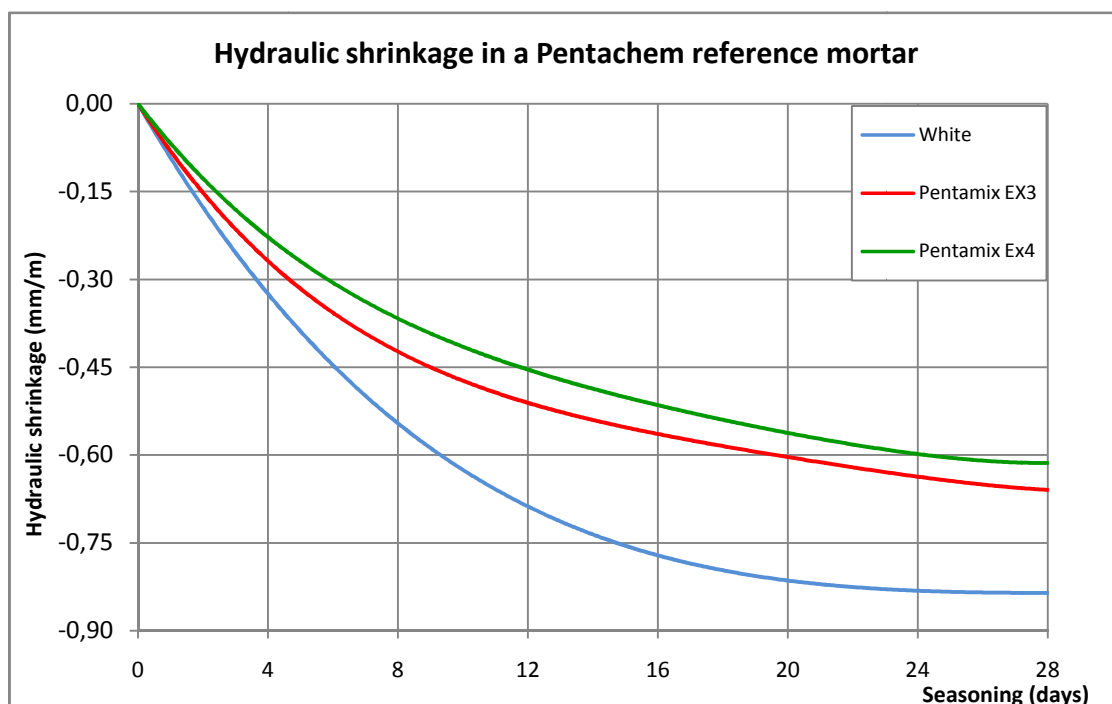
FEATURES Pentamix EX 4 reduces both plastic and hydraulic shrinkage, acting chemically on the tensions produced before the end of setting time and during the hardening process. It does not show any expansive action.

The product is a white ready-to-use powder made of a cyclo aliphatic alcohol supported on silica.

Pentamix EX 4 allows a reduction of the total shrinkage up to 50% after 28 days and 30% after 1 year. Cracking of the material will subsequently be reduced significantly.

USE Pentamix EX 4 is suitable for the preparation of premixed dry mortars and grouts based on ordinary Portland cement as well as systems containing alumina cement. Pentamix EX 4 is usually used in all admixtures that need a reduction of the total shrinkage which do not want the introduction of any soluble saline substance and in all admixtures where the content of water is high.

Pentamix EX 4 is compatible with most existing accelerators, retarders, superplasticizers as the Pentaflow range and with all redispersible powders.



	Data	Method	
TECHNICAL DATA	State:	Hygroscopic powder	Visual
	Colour:	White	Visual
	Bulk Density:	0,300 – 0,450 kg/dm ³	IST. 10.07
	Granulometry:	min. 95% < 0,600 mm	IST. 10.09
	pH_{20°C (sol.2%)}	8,0 ± 1,0	IST 10.05
	Humidity :	max. 5,0%	IST. 10.04
	Chloride content:	< 0,05%	IST. 10.34
	Water solubility:	Partially soluble	IST. 10.21
	Active matter:	Min.60% Anticaking max 40%	

DOSAGE The recommended dosage of **Pentamix EX 4** is 0,3 – 0,5 %. With this dosage, product doesn't cause any retardation on the setting time. Anyway the product may cause a slight retardation on the setting time at higher dosages with very low temperature. Different dosages can be used, depending on the expected results, after carrying out preliminary tests.

STORAGE AND VALIDITY **Pentamix EX 4** has 12-month validity beginning with delivery, if it is stored in a dry place and in the original bags kept perfectly closed.
Pentamix EX4 must be stored at a temperature lower than 50°C and protected from direct sunrays.
Pentamix EX 4 is an hygroscopic powder, so it has to be stored in a dry place and it is advisable to close bags carefully after each collection.

PRECAUTIONS **Pentamix EX 4** is irritant by contact with skin and by ingestion. If inhaled it can cause a slight irritation of the respiratory tract, 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. For further information see Safety Data Sheets.

PACKAGING 25-kilo polythene-paper bags.
500 kilo big 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.

