



# PENTAMIX EX 3

## Shrinkage reducing agent

Technical Data Sheet August 2012

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DESCRIPTION	<b>Pentamix EX 3</b> is a shrinkage reducing admixture for cementitious dry mortar and grout systems.	
FEATURES	<p><b>Pentamix EX 3</b> reduces the material shrinkage both in the plastic and hardening stages. It acts chemically to prevent the material to shrink by altering the conditions for the shrinkage mechanism. It does not show any expansive action.</p> <p>The product is a white ready-to-use powder made of a cyclo aliphatic alcohol supported on silica.</p> <p><b>Pentamix EX 3</b> allows a reduction of the total shrinkage up to 50% after 28 days and 30% at the age of 1 year. Cracking of the material will subsequently be reduced significantly.</p>	
USE	<p><b>Pentamix EX 3</b> is suitable for the preparation of premixed dry mortars and grouts based on ordinary Portland cement as well as systems containing alumina cement.</p> <p><b>Pentamix EX 3</b> is usually used both in all admixtures that need a reduction of the total shrinkage which do not want the introduction of any soluble saline substance and where the content of water is high.</p> <p><b>Pentamix EX 3</b> is compatible with most existing accelerators, retarders, superplasticizers as the Peramin range and with all redispersible powders.</p>	
TECHNICAL DATA	Form:	Hygroscopic powder
	Colour:	White
	Granulometry:	Min. 85% < 180 µm
	Humidity:	Max. 5%
	Density:	0.200 – 0.350 kg/dm <sup>3</sup>
	pH <sup>20°C</sup> :	8.0 ± 1.0
	Equivalent Na <sub>2</sub> O:	< 1%
	Chloride content:	< 0.05%
	Water solubility:	Partially soluble
	Storage:	In a sheltered and dry place

<b>DOSAGE</b>	The recommended dosage of <b>Pentamix EX 3</b> is 0.3 – 0.5 %. The product may cause a slight retardation on the setting time at higher dosages or low temperature. Different dosages can be used, depending on the expected results, after carrying out preliminary tests.
<b>STORAGE AND VALIDITY</b>	<b>Pentamix EX 3</b> has 12-month validity beginning with delivery, if it is stored in a dry place and in the original bags kept perfectly closed. <b>Pentamix EX 3</b> 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.
<b>PRECAUTIONS</b>	<b>Pentamix EX 3</b> 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.
<b>PACKING</b>	20-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.