



# PENTAMIX AER 205

Air agent in powder form for cement-based and gypsum-based mixtures

Technical Data Sheet, June 2015

**DESCRIPTION** **Pentamix AER 205** is an additive in powder form specific for the introduction of air micro-bubbles into cement-based and gypsum-based premixtures.

**FEATURES** Thanks to its special grain size conformation, specific density and facility of dispersion **Pentamix AER 205** allows obtaining particularly homogeneous mixtures without risking segregation after mixing. Its high concentration of active substance and the fast solubility in water allow obtaining highly stable air micro-bubbles that make plasters and mortars easily applicable by hand and machine and shrinkage free. Besides, it improves spray laying and the smoothing of the mixtures. In the hardened state, its special porosity and capillarity produce plasters and mortars that are more resistant to the cycles of freezing and thawing and more durable than those obtained with milder air agents. Moreover, the wetting capacity of **Pentamix AER 205** also allows a better exploitation of the other additives contained in the formula of the finished product.

**USE** **Pentamix AER 205** is used as an air additive in the preparation of premixed cement-based and gypsum-based plasters and finish mixtures to be applied by hand and machine. The product is normally added to the other components during mixing until total dispersion. To avoid loss of additive during this operation, it is advisable to limit the degree of pulverization especially if it is added in the pure state as the last component.

## TECHNICAL DATA

	Data	Method
<b>Chemical composition:</b>	Sodium Lauryl Sulphate	
<b>State:</b>	Powder	Visual
<b>Colour:</b>	White	Visual
<b>Density:</b>	0,500 ± 0,100 kg/dm <sup>3</sup>	IST. 10.06
<b>Granulometry:</b>	Min. 80 % < 0,300 mm.	IST. 10.09
<b>Humidity :</b>	Max 5 %	IST. 10.04
<b>Water solubility:</b>	Partial	IST. 10.21

<b>DOSAGE</b>	<p>The range of dosage of <b>Pentamix AER 205</b> is 0.02-0.1% of the weight of the dry mixture, depending on the expected effect.</p> <p>Anyway, it is advisable to carry out preliminary tests in order not to exceed the maximum dosage allowed by the characteristics of the finished product, keeping in mind that it always exists a critical dosage for these products beyond which dispersing action prevails over aerating action.</p>
<b>STORAGE AND VALIDITY</b>	<p><b>Pentamix AER 205</b> has 12-month validity beginning with delivery, 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.</p> <p>It is therefore advisable to close bags carefully after each collection.</p>
<b>PRECAUTIONS</b>	<p><b>Pentamix AER 205</b> is <u>irritating for all the mucosas and the eyes.</u></p> <p>It is normally well stood in contact with skin and easily removable with water and soap.</p> <p><u>Inhalation causes serious irritation of the first part of the respiratory tract. This trouble disappears immediately by stopping the handling; it is therefore advisable to use dust masks and not to disperse it in the environment.</u></p> <p>In case of accidental loss it must be picked up in the dry state and discharged in an authorised waste dump.</p>
<b>PACKING</b>	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.