

PENTAMIX OS.10

Additive for slurries and osmotic mortars

Technical Data Sheet September 2015

DESCRIPTION

Pentamix OS.10 is an additive in powder form to add to cement mixtures for the osmotic waterproofing of walls in concrete, plastered solid or airbricks, and old masonries.

FEATURES

Thanks to its special composition, **Pentamix OS.10** gives slurries and hardened mortars excellent impermeability to rising water and beating rain. It is therefore particularly suitable for external plasters, for treating tanks and for the waterproofing of walls with water in slight counterthrust.

Unlike many "ready-to-use" products on the market, **Pentamix OS.10** makes slurries and mortars easily applicable and well adhesive to the support with very low waste.

Like all osmotic products, it is more suitable for applications on wet, but not water drenched supports. That allows a faster migration of waterproofing salts towards the interior of the support and a better crystallization, which is essential to fill up porosity and capillarity.

Pentamix OS.10 allows the production of cement mixtures with high mechanical and chemical strength, but still very rigid. It is therefore important that the walls to treat are well settled and not subject to vibrations.

Please note that, differently from what it happens after a treatment with solvent based silicone solutions with a pearly effect, mortars and slurries containing **Pentamix OS.10** can receive any kind of coating.

USE

Pentamix OS.10 is added to the other components of the mixture in the mixer until perfect homogenization.

As already said, it is used for producing cement slurries and grouts with aggregates up to 0.300 mm and mortars with aggregates up to 0.600 mm. Besides, it is advisable to use preferably clean silica or crystal-calcareous sand with well-assorted grain size.

The suggested type of cement to use for osmotic mortars is Portland type 42.5 R. To speed up the hardening process, it is advisable to add 4–7% of **Legarapid 1H**. The quantity of water used in the preparation of the mixtures for slurries and mortars must be as low as possible, compatibly with the consistency necessary for application with a brush.

The mixtures applied after the initial hardening can let out some soft, white-colored efflorescence, a sign of the osmotic activity of the salts contained in **Pentamix OS.10**. This activity continues until the fuzz disappears by turning into powder.

TECHNICAL DATA

| | Data | Method |
|-------------------|----------------------------------|------------|
| State: | Powder | Visual |
| Colour: | White-beige | Visual |
| Bulk density: | 0.900 ± 0.100 kg/dm ³ | IST. 10.07 |
| Granulometry: | Min. 85% < 0.180 mm | IST. 10.09 |
| Humidity: | Max. 10% | IST. 10.04 |
| Water solubility: | Partially soluble | IST. 10.21 |

DOSAGE

The recommended dosage of **Pentamix OS.10** is 2-3% of the global weight of the dry mixture. Different dosages can be used depending on the expected results, after carrying out preliminary tests.

STORAGE AND VALIDITY

If it is stored in a dry place and in the original bags kept perfectly closed, **Pentamix OS.10** has a 12 months validity starting from the date on the delivery note. If the product absorbs moisture, this does not affect its efficaciousness, but it makes its dosage difficult and the dispersion in the finished mixture not homogeneous. It is therefore advisable to close the bags carefully after each collection.

PRECAUTIONS

Pentamix OS.10 is irritating for the skin, the eyes and by ingestion because of the acid character of its components. Inhalation can cause an irritation of the first part of the respiratory tract.

It is therefore advisable to use dust masks, protective glasses and rubber gloves. It is easily removable from any surface with water and soap.

In case of accidental loss, it must be picked up in the dry state and discharged in an authorised waste dump.

Keep out of children's reach. Not disperse the product and the bags in the environment.

For more information please refer to the Safety Data Sheet.

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.

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