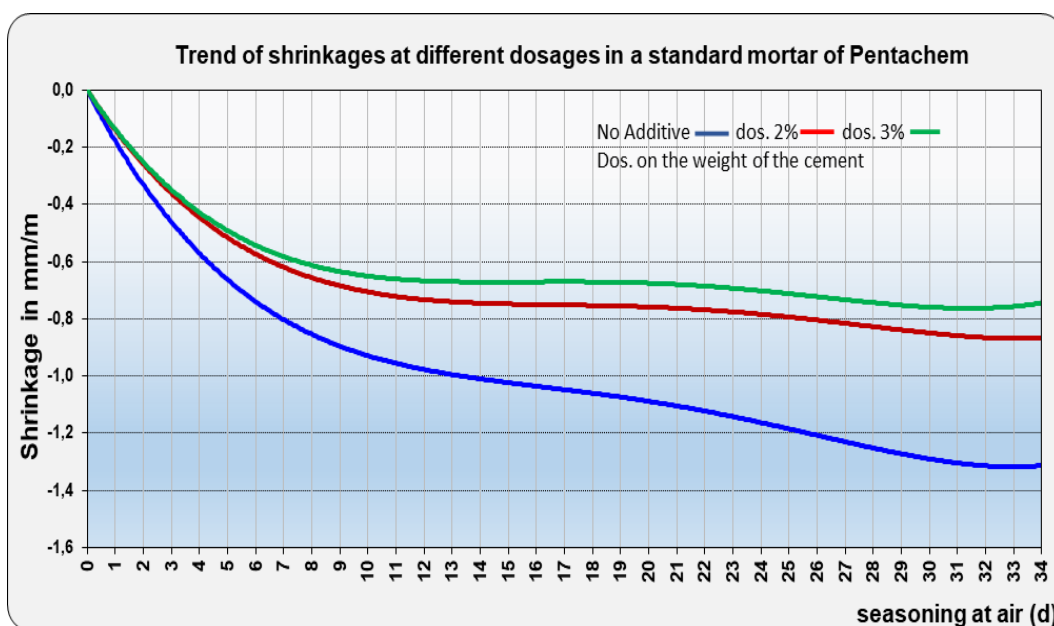


PENTAMIX EX 5

Shrinkage reducing agent

Technical Data Sheet May 2019

- DESCRIPTION** **Pentamix EX 5** is a shrinkage reducing agent for cement-based systems, particularly for grouts, dry mortars, and concretes.
- FEATURES** **Pentamix EX 5** reduces both plastic and hydraulic shrinkage, acting physically and chemically on the tensions produced before the end of setting time and during the hardening process.
The product is an ivory-white ready-to-use powder made of a mix of multifunctional aliphatic alcohols and well treated minerals of calcium.
Pentamix EX 5 allows reducing of the total shrinkage up to 50% after 28 days and 30% after 1 year. Cracking of material will subsequently be reduced significantly.
- USE** **Pentamix EX 5** is suitable for the preparation of concrete and premixed dry mortars based on ordinary Portland cement, as well as systems containing alumina cement.
Pentamix EX 5 is usually used in all admixtures that need a reduction of the total shrinkage. It is perfectly compatible with most of the existing accelerators, retarders, superplasticizers as the Pentaflow range, and with all redispersible powders.



The values have been recorded on mortar composed by 42.5 II/A-LL cement, normal sable, and water

TECHNICAL DATA

| | Data | Method |
|------------------------------------|----------------------------------|------------|
| State: | Hygroscopic powder | Visual |
| Colour: | Ivory white | Visual |
| Bulk Density: | 0.600 ÷ 0.750 kg/dm ³ | IST. 10.07 |
| Active matter: | Min.86% Anticaking max 14% | |
| Granulometry: | Min.85% < 0.180 mm | IST. 10.09 |
| pH^{20°C} (sol.2%): | 12.0 ± 1.0 | IST. 10.05 |
| Humidity: | Max. 11.0% | IST. 10.04 |
| Chloride content: | < 0.05% | IST 10.34 |
| Water solubility: | Partially soluble | IST. 10.21 |
| Storage: | In a sheltered and dry place | |

DOSAGE

The recommended dosage of **Pentamix EX 5** is:

| Mortars <i>On the weight of the dry mix</i> | |
|--|------|
| Min. | Max. |
| 0.3 % | 1.0% |

| Concretes <i>On the weight of cement</i> | |
|---|------|
| Min. | Max. |
| 1.2% | 4.0% |

We suggest not exceeding the above-indicated maximum dosage, since an over-dosage can promote an expansive phenomenon in the first days of seasoning. It is however suggested to perform indicative tests to determine the dosage most suited for the specific needs.

STORAGE AND VALIDITY

Pentamix EX 5 has a 8 months validity beginning with delivery, if it is stored in a dry place and in the original bags kept perfectly closed.

Pentamix EX 5 is a 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 5 is irritant by contact with skin and by ingestion.

If inhaled, it can cause a slight irritation of the first part of respiratory tract, so 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 authorized waste dump if it cannot be reused in the basic mixtures.

For further information, see Safety Data Sheets.

PACKAGING

25 kg polythene-paper bags

500 kg big bags.

All the data stated in this technical sheet are based on the best of our knowledge and experience. 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.