



# PENTAFLW AU.3

## Additive in powder form for cement-based self-levelling systems

Technical Data Sheet March 2020

**DESCRIPTION** **Pentaflow AU.3** is an additive based on polycarboxylate polymers specific for low-thickness, cement-based self-levelling systems and for finished exposed floorings with a thickness ranging from 2 mm to 30 mm.

**FEATURES** **Pentaflow AU.3** is an additive formulated for low-thickness, cement-based self-levelling mortars and it gives an excellent flow and allows a perfect finish up to 30 mm. Thanks to its peculiar formulation, it can be used in Portland cement-based products and in more complicated formulations with binary and ternary binders. **Pentaflow AU.3** strongly reduces the risk of segregation and cracks caused by an excessive quantity of water in the mixture. It also reduces both plastic hydraulic shrinkage. When used in a well-calibrated formulation of binders and aggregates, it give very good results in terms both of aesthetic and mechanical strengths.

**USE** **Pentaflow AU.3** is used or the preparation of premixed, cement-based self-levelling systems and it allows producing exposed floorings for both indoor and outdoor. In case of formulations subjected to strong shrinkage, it can be used together with **Pentamix EX3** or **Pentamix EX5** (expansive additive) in order to compensate the shrinkage. The additive is normally added to the other raw materials during mixing until total homogenisation. It is suggested to add redispersible polymers for self-levelling systems, such as **Pentaresin P5**, at a starting dosage of 5% on the admixture, in order to reach the results of adhesion to concrete required by the standards and a beautiful surface.

	Data	Method
<b>TECHNICAL DATA</b>		
<b>State:</b>	Powder	Visual
<b>Colour:</b>	Ivory white	Visual
<b>Bulk density:</b>	0.650 – 0.850 kg/dm <sup>3</sup>	IST. 10.07
<b>Granulometry:</b>	min.96% < 0.600 mm	IST. 10.09
<b>Humidity:</b>	max. 4.0%	IST. 10.04
<b>Hydrogen ionic concentration pH (sol 2%):</b>	6.00 – 8.00	IST. 10.05
<b>Water solubility:</b>	Partially soluble	IST. 10.21

<b>DOSAGE</b>	The normal dosage of <b>Pentaflow AU.3</b> ranges from 0.80% to 2.00% on the weight of the dry mix.
<b>STORAGE AND VALIDITY</b>	If it is stored in a dry place and in the original bags kept perfectly closed, <b>Pentaflow AU.3</b> has a validity of 12 months starting from the date on the delivery note. Should moisture be absorbed by the product, this does not affect its efficaciousness, but it makes it difficult to dose and it can cause a non homogeneous distribution in the final admixture. It is therefore advisable to close bags carefully after each collection.
<b>PRECAUTIONS</b>	<b>Pentaflow AU.3</b> is deemed harmless. Nevertheless, it is necessary to use the PPE for the use of powdery products. It is easily removable with water and soap. Inhalation can cause a slight irritation of the first part of the respiratory tract, so it is advisable to use dust masks. In case of accidental loss it must be picked up in the dry state and discharged in an authorised waste dump. Never use water; it makes surfaces slimy and dangerous. For further information, please check the SDS.
<b>PACKAGING</b>	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.