



PENTARESIN P 3

Re-dispersible resin in powder form

Technical Data Sheet, June 2021

DESCRIPTION	Pentaresin P 3 is a modified vinyl- versatic copolymer resin in powder form that disperses in water. It is used for preparing cement-based, gypsum-based and lime-based mixtures and, above all, for smooth finishes.
FEATURES	Pentaresin P 3 is a resin made up of a vinyl copolymer internally modified to make it highly alkali-resistant and non re-emulsifiable. In the fresh state, it gives the mixture high adhesiveness to all traditional supports while keeping applicability and smooth running easy. It does not modify thixotropy of cement-based and gypsum-based adhesives in the application phase, and, in the hardened state, it gives them excellent tenacity. It allows tiling also in external, wet and hot environments without any problems of detachment.
USE	Pentaresin P 3 is used as a corrector of adhesiveness in the preparation of premixed cement-based and gypsum-based adhesives, very fine skim cement mixtures, external plasters and whenever it is necessary to give hydraulic mixtures tenacity and resistance to shocks and vibrations. It is particularly suitable for the preparation of the adhesive-smooth finishes used in the application of insulating boards (polystyrene, polyurethane, etc.) The product is normally added to the other components during mixing until total dispersion. During wet mixing of the mortars containing high dosage of Pentaresin P 3 , avoid using high-speed mixers in order not to produce too much foam.

	Data	Method	
TECHNICAL DATA	Chemical nature:	PVAC/VEOVA Copolymer	
	State:	Powder	Visual
	Colour:	White	Visual
	Density:	0,525 ± 0,075 kg/dm ³	IST. 10.06
	Granulometry:	Min. 96 % < 0,180 mm	IST. 10.09
	Humidity :	Max.2,0 %	IST. 10.04
	Water solubility:	Dispersible	IST. 10.21
	Active substance:	90 % about	

Powder dispersed in water in a ratio of 1:1

pH of dispersion:	7.0 – 8.0
Minimum film forming temperature (MFFT):	approx. +8° C
Features of the film	opaque, flexible and strong
Glass transition (T_g) :	approx. +24°C

DOSAGE

The dosage of **Pentaresin P 3** ranges between 0.5 and 4 % of the weight of the dry mixture, depending on the expected features.

STORAGE AND VALIDITY

Pentaresin P 3 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 effectiveness, but it makes its dosage difficult and the distribution in the finished mixture not homogeneous. It is therefore advisable to close bags carefully after each collection.

PRECAUTIONS

Pentaresin P 3 is harmless both by contact and by ingestion. 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. Dry-clean the surfaces, avoiding the use of water; it makes surfaces slimy and dangerous.

PACKING

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.