



# PENTARESIN P 3

## Re-dispersible resin in powder form

Technical Data Sheet, June 2021

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DESCRIPTION | <p><b>Pentaresin P 3</b> is a modified vinyl-<b>versatic</b> 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.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| FEATURES    | <p><b>Pentaresin P 3</b> is a resin made up of a vinyl copolymer internally modified to make it highly alkali-resistant and non re-emulsifiable.</p> <p>In the fresh state, it gives the mixture high adhesiveness to all traditional supports while keeping applicability and smooth running easy.</p> <p>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.</p> <p>It allows tiling also in external, wet and hot environments without any problems of detachment.</p>                                                                                                                                                  |
| USE         | <p><b>Pentaresin P 3</b> 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.)</p> <p>The product is normally added to the other components during mixing until total dispersion.</p> <p>During wet mixing of the mortars containing high dosage of <b>Pentaresin P 3</b>, avoid using high-speed mixers in order not to produce too much foam.</p> |

### TECHNICAL DATA

|                   | Data                             | Method     |
|-------------------|----------------------------------|------------|
| Chemical nature:  | PVAC/VEOVA Copolymer             |            |
| State:            | Powder                           | Visual     |
| Colour:           | White                            | Visual     |
| Density:          | 0,525 ± 0,075 kg/dm <sup>3</sup> | 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**

|                                                 |                             |
|-------------------------------------------------|-----------------------------|
| <b>pH of dispersion:</b>                        | 7.0 – 8.0                   |
| <b>Minimum film forming temperature (MFFT):</b> | approx. +8° C               |
| <b>Features of the film</b>                     | opaque, flexible and strong |
| <b>Glass transition (T<sub>g</sub>) :</b>       | 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 efficaciousness, 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

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.