



PENTARESIN 50

Polymeric resin for bonding agents

Technical Data Sheet September 2015

DESCRIPTION

Pentaresin 50 is a synthetic polymer in aqueous dispersion, highly stable in alkali systems, specifically modified for the preparation of cement mixtures. Its special formulation allows obtaining highly adhesive films and slurries that provide good bonding to the support of all the subsequent applications.

FEATURES

Pentaresin 50 is a viscous and milky liquid, dilutable with water. The hardened films obtained with **Pentaresin 50** have remarkable elasticity and excellent resistance to alkalis; they are not re-emulsifiable either with cold water or hot water. These characteristics make the bonding very durable and weatherproof even in severe weather conditions.

In practice, **Pentaresin 50** impermeabilizes the surfaces and the mortars containing it, making them inert to the action of oils, solvents and many other chemical products.

USE

Pentaresin 50 is used whenever it is necessary to improve the bonding of plasters and mortars to smooth supports or to supports that show a difficult adhesion.

It is used for bonding smooth finish mixtures made with cement, lime or gypsum, to old or hardened plasters. It is also used in the preparation of bonding slurries and cement mortars for the smooth finish coat and the restoration of ruined structures, the remaking of chips, the sealing of gaps, the levelling of base courses of any kind. Besides, it is used for bonding an old concrete to a new layer, for the protection of reinforcing bars and for moisture-proofing any surface in concrete.

PREPARATION OF SLURRY

Especially when the surfaces are not absolutely flat, it is advisable to use a cement slurry composed of 1 part of **Pentaresin 50** perfectly mixed with 1 part of water, then, while mixing slowly and continuously, add 3 parts of cement (Portland 42.5 R) until obtaining a homogeneous dispersion without any lumps.

The final mixture can be applied with a brush or a roller, depending on the viscosity and the type of surface to treat.

	<i>Bonding slurry</i>		<i>Waterproof mortar</i>		<i>Adhesive plaster</i>	
PENTARESIN 50	Lt	1	Lt	1	Lt	1
Water	Lt	1	Lt	1	Lt	3
Cement 42,5 R	Lt	ca. 3	Lt	ca. 3	Lt	ca. 6
sand		-----	Lt	ca. 3	Lt	ca. 15

APPLICATION

Mixtures containing **Pentaresin 50** are to be applied on perfectly clean supports, sound and free from incoherent materials, oils, greases, waxes, calcimines, water films and any other anti-adhesive material.

Whether it is used as it is, diluted or as slurry, the mixture to bond must be applied on the resin or the slurry when it is still fresh. Pentaresin 50 and the mixtures containing it are to be applied at a temperature not below +2°C.

In case the product is too viscous for the type of application required it is possible to dilute it with water until obtaining the expected workability.

After the dilution it is important to mix from time to time in order to re-homogenize the dispersion

TECHNICAL DATA

	Data	Method
State:	Liquid	Visual
Colour:	Milky-white	Visual
Density:	1,035±0,025 kg/dm ³	IST. 10.06
Potential of hydrogen (pH):	5,5±1,0	IST. 10.05
Water solubility:	Total dispersibility	IST. 10.21

DOSAGE

On smooth or low-porosity supports, the consumption is about 150 - 250 g/m²

STORAGE AND VALIDITY

Pentaresin 50 can be damaged by the frost and by too hot temperatures: store at a temperature between 0°C and 50°C.

It has 12-month validity beginning with delivery, if it is stored in the right conditions in the original pails and cans kept perfectly closed and not exposed to direct solar rays.

PRECAUTIONS

Pentaresin 50 is harmless by contact with skin, but it tends to harden fast, so it is necessary to remove it immediately with water and soap. In case it has hardened, wash plentifully with water and soap without using any solvents.

In case of contact with eyes, wash with water immediately and plentifully.

Do not disperse the product, the pails and the cans in the environment. Do not ingest. Keep out of children's reach.

PACKAGING

20-kilo plastic pails

25-kilo plastic cans

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.