

Acronal® S 430 P

Polymer Dispersions for Construction

Areas of application

Acronal S 430 P is used first and foremost to modify hydraulic binders. Because of its outstanding flexibilizing effect even at temperatures below 0 °C, Acronal S 430 P is used mainly in the area of flexible cementitious waterproofing slurries. The low glass transition temperature and the highly elastic behavior in the redispersion film lowers the elastic modulus of mortars and spray mortars considerably. The elongation at break, abrasion resistance and adhesion are increased.

Furthermore, the special additive system employed in Acronal S 430 P ensures excellent workability, a long pot life and no cracking when the building material sets. The powder is completely free of cellulose derivatives. Because of its high binding strength and rapid redispersibility, Acronal S 430 P can be used in formulations with a high polymer content. Waterproofing slurries for composite sealing systems under tiles (e. g. bathroom, balcony, patio) and cellar sealing systems are prime examples here.

With Acronal S 430 P it is possible to formulate (single-component) powder products with unique flexibility and adhesion even on critical substrates. In addition, Acronal S 430 P can be used to make highly flexible tile adhesives which do not fail, even if, for example, they are exposed to large fluctuations in temperature outdoors. Single-component products formulated with Acronal S 430 P are also excellent for use on critical substrates such as wooden floors, which, being inherently subject to movement, place high demands on the flexibility of the tile adhesive.

Chemical nature

Redispersible polymer powder based on an aqueous, plasticizer-free, anionic copolymer dispersion of acrylic acid ester and styrene.

~ 99 %

Properties

Physical form

Powder

Solids content

Technical data
(no supply specification)

pH- value $\sim 7-9$ Bulk density $\sim 500 \text{ kg/m}^3$

Glass transition temperature ~ -15 °C

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Application

Processing

We recommend adding 20 - 30 % Acronal S 430 P to mortars and 80 - 150 % to cementitious flexible waterproofing slurries, expressed in each case in relation to cement.

Dry mortars that contain Acronal S 430 P can be mixed with the usual equipment but, because of the thermoplastic nature of the product, care must be taken to ensure that there is no excessive increase in temperature due to the shear forces being too high when the dry components are mixed.

Acronal S 430 P swells when it is solvated in alkaline systems that incorporate hydraulic binders. It manifests its properties directly after water is added without the need for a long maturing time.

The rheology of products can be adjusted to suit individual applications by adding the usual thixotropes such as micronized silica, cellulose derivatives or Rheovis® HS 1980 in the customary manner.

To avoid incorporation of air we recommend the addition of approx. 0.4 % Vinapor DF 9010 F related to the dry mix.

Safety

When handling this product, please comply with the advice and information given in the safety data sheet and observe protective and workplace hygiene measures adequate for handling chemicals.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights, etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. The agreed contractual quality of the product specification. It is the responsibility of the recipient of our product to ensure that any proprietary rights and existing laws and legislation are observed.