

PRIMIS® SAF 9000

Product description

PRIMIS® SAF 9000 is a very finely divided polymer dispersion of a special styrene/acrylic acid ester copolymer.

PRIMIS® SAF 9000 is manufactured without coalescent, organic solvents, plasticizers or alkyl phenol ethoxylate (APEO) containing compounds. The product is in the process of introduction into industrial use (Scale-up Product). Therefore the product data given are subject to change.

Always consult WACKER POLYMERS about the product's availability before using it for industrial purposes.

Properties

Its extremely fine particle size allows PRIMIS® SAF 9000 to penetrate into porous surfaces very well, thereby reinforcing the substrate. Surfaces treated with PRIMIS® SAF 9000 exhibit improved tensile adhesion strength and scrub resistance. The unique polymer composition of the dispersion results in films that are stain-resistant against aqueous and oily dirt, making surfaces treated with PRIMIS® SAF 9000 easier to clean as well as improving their mechanical properties.

Application

PRIMIS® SAF 9000 can be used both for Construction as well as Paints & Coatings applications.

In Construction PRIMIS® SAF 9000 is particularly suitable for producing impregnation and protective treatments for mineral-based substrates such as concrete, decorative self-leveling flooring compounds, natural stone and gypsum. The dispersion is also suitable for treating mineral plasters, roofing tiles, wood, fibers and nonwovens.

Furthermore, PRIMIS® SAF 9000 can be used as a primer for treating substrates before applying screeds and floor leveling compounds.

For Paints & Coatings PRIMIS® SAF 9000 can be used as a film-forming polymer dispersion ideally suitable for colored marble chip plasters. As co-binder for high performance interior and exterior paints and plasters PRIMIS® SAF 9000 is effective in order to

improve of blocking resistance and to increase stain resistance. Paints formulated with PRIMIS® SAF 9000 reduce snail excretion (surfactant bleaching) on walls.

The following application table lists typical uses for PRIMIS® SAF 9000. Please contact your WACKER customer service specialist for more and further possible application fields.

Application	Recommendation	Suitability
Primers	High-performance primers	●
	Bonding agents	●
	Penetration primers	●
Surface Treatment	Mineral-based and absorbent surfaces	●
Interior Paints	Co-binder to boost stain resistance	○
	Co-binder to boost blocking resistance	●
Exterior Paints	Co-binder to boost snail trail resistance	●
Plasters	Binder for colored marble chip plasters	●
● highly recommended ○ recommended		

Processing

PRIMIS® SAF 9000 is highly compatible with polymer dispersions such as VAE, styrene acrylics and pure acrylics. 10 – 20 % PRIMIS® SAF 9000 on total binder is recommended when used as a co-binder.

PRIMIS® SAF 9000 exhibits excellent shear stability and is highly compatible with silicone and wax emulsions, as well as with other polymer dispersions such as styrene/acrylate, vinyl acetate and PU. If the product is used to impregnate porous substrates, we recommend diluting the dispersion to a solids content of 5 – 30%, depending on how absorbent the substrate is. The product can be applied by brushing, rolling, spraying or wiping. For best results, apply the product in two coats using a short-pile velour mop.

Film-forming aids: PRIMIS® SAF 9000 is made without

the addition of film-forming agents, organic solvents or plasticizers, and forms films at temperatures above 13 °C. Forming films at lower temperatures requires the addition of film-forming agents.

Storage

When the dispersion is stored in tanks, proper storage conditions must be maintained. PRIMIS® SAF 9000 has a shelf life of 6 months starting from the date of receipt if stored in the original, unopened containers at temperatures between 5 and 30 °C. Iron or galvanized-iron equipment and containers are not recommended. Therefore the use of containers and equipment made of ceramics, rubberized or enameled materials, appropriately finished stainless steel, or plastic (e.g. rigid PVC, polyethylene or polyester resin) is recommended.

As polymer dispersions may tend to superficial film formation, skins or lumps may form during storage or transportation. Filtration is therefore recommended prior to utilization of the product.

Preservation for transport, storage and further processing

PRIMIS® SAF 9000 is adequately preserved during transportation and storage if kept in the original, unopened containers. However, if it is transferred to storage tanks, the dispersion should be protected against microbial attack by adding a suitable preservative package. Measures should also be taken to ensure cleanliness of the tanks. In unstirred tanks, a layer of preservative-containing water should be sprayed onto the surface of the dispersion to prevent the formation of unwanted skin and possible attack by microorganisms. The thickness of this water layer

should be < 5 mm for low viscosity dispersions and up to 10–20 mm for high viscosity products. Measures should be taken to ensure that only bacteria-free air enters the tank when the dispersion is removed. Finished products manufactured from polymer dispersions usually also require preservation. The type and scope of preservation will depend on the raw materials used and the anticipated sources of contamination. The compatibility with other components and the efficacy of the preservative should always be tested in the respective formulation. Preservative manufacturers will be able to advise you about the type and dosage of preservative required.

Packaging

Non-returnable containers of 1 t capacity and road tankers.

Please contact your WACKER customer representative for further possible packaging units.

Additional information

If PRIMIS® SAF 9000 is used in applications other than those mentioned, the choice, processing and use of PRIMIS® SAF 9000 is the sole responsibility of the purchaser. All legal and other regulations must be complied with.

Safety notes

Comprehensive instructions are given in the appropriate Material Safety Data Sheets. These are available on request from WACKER sales offices.

Product data		
Specification data	Inspection Method	Value
Solids content	DIN EN ISO 3251	41 - 43 %
Viscosity, dynamic	DIN EN ISO 2555	100 - 500 mPa.s
Measurement condition for the method	Brookfield, spindle 2 / 20 rpm	
pH-Value	DIN/ISO 976	6,5 - 7,5
Typical general characteristics	Inspection Method	Value
Minimum film forming temperature	DIN ISO 2115	approx. 13 °C
Predominant particle size	specific method	approx. 70 nm
Protective colloid / emulsifier system		surface active emulsifiers
Compatibility with cement	specific method	incompatible
Appearance of the dispersion film	Visual	glossy
Glass transition temperature	specific method	approx. 21 °C

Figures below "Typical general characteristics" are intended as a guide and should not be used in preparing specifications.

The data presented in this medium are in accordance with the present state of our knowledge but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this medium should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The information provided by us does not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the product for a particular purpose.

The management system has been certified according to DIN EN ISO 9001 and DIN EN ISO 14001

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For technical, quality, or product safety questions, please contact:

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