Product Information
Acronal® 7642

Polymer dispersion for the manufacture of high-quality exterior and interior architectural paints

Acronal® 7642 is a Styrene acrylic binder for paints with outstanding titanium dioxide utilization.
Additionally, it is designed with enhanced affinity towards titanium dioxide, leading to its high utilization. With broad formulation latitude, it offers formulators an edge on formulation cost without compromising the basic properties of paint film, namely adhesion to masonry surfaces and wet hiding.

Chemical Nature:
Polymer dispersion of acrylic ester and styrene

Benefits
- Outstanding titanium dioxide utilization
- Broad formulation latitude
- Exceptional cost-performance ratio
- Excellent saponification and alkaline resistance
- Very good water resistance

Features
- Enhanced TiO2 affinity
- APEO and formaldehyde free

Properties

Product specification*	Solids content	%	50 ± 1
	pH value	pH	7.0 – 8.5
	Viscosity at 23 °C, RV DV 2/50	mPa s	100 – 800
Other properties of dispersions	Minimum film-forming temperature (ISO 2115)	°C	20
	Density (ISO 2811-1)	g/cm^3	approx. 1.04
	Type of dispersion		anionic

*The aforementioned data shall constitute the agreed contractual quality of the product at the time of passing of risk. The data are controlled at regular intervals as part of our quality assurance program. Neither these data nor the properties of product specimens shall imply any legally binding guarantee of certain properties or of fitness for a specific purpose. No liability of ours can be derived therefrom.

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Applications

Areas of application

Acronal® 7642 is an anionic polymer dispersion for paints with outstanding titanium dioxide utilization with application areas : Façade paints, Interior paints, Textured finishes, Exterior insulation and finishing systems (EIFS), Primers

Processing

It is advisable to disperse the pigments and extenders with wetting and dispersing agents such as Dispex® CX 4320 and water-soluble polyphosphates in an alkaline medium in advance before the polymer dispersion is added. It is only when products with very high viscosity are being mixed in low-speed mixers that Acronal® 7642 should be added together with the wetting and dispersing agents.

Acronal® 7642 has very good compatibility with pigments and fillers. Various thickeners can be added to emulsion paints in order to adjust their viscosity and workability. Cellulose ethers, polyacrylates, urethane thickeners (such as Rheovis® AS 1125, Rheovis® HS 1212 and Rheovis® PE 1331) and bentonite can be used. The choice of thickener depends on whether the coating is expected to be free-flowing or more thixotropic.

Solvents need to be added in order to enable the polymer to form a uniform film at temperatures below ambient temperature. It is usually sufficient to add these solvents at a level of 5 - 10%, expressed as a proportion of the total solid content of dispersion. Short-chain alcohol and glycols improve the freeze-thaw resistance of paints, but they can not be used to lower the film-forming temperature. If possible, solvents should not be added direct to the polymer dispersion, they should be mixed with the pigment paste and then added.

Acronal® 7642, like all fine dispersions, has a tendency to foam. It is therefore necessary to add a commercial defoamer at the level of 0.3 – 0.6%.Trials should be carried out to test the effectiveness of the defoamer.

Acronal® 7642 is protected against attack by microorganisms, preservatives must still be added to the formulated products so as to ensure uniform quality even with prolonged storage. Compatibility and effectiveness must be determined by preliminary trials.

Customers have to carry out their own trials when developing and processing products based on Acronal® 7642. The compatibility of Acronal® 7642 with other ingredients of formulations, its effect on mixing process and its adhesion on different substrates etc., are affected by a variety of factors which are too numerous for us to take into account in our own trials. This includes testing its stability by storing it at ca.50˚C to confirm that its viscosity remains stable.

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Safety

General
The usual precautions for handling chemicals must be observed. These include the measures set out in the guidelines of the organizations responsible for safety at work, in particular, good ventilation and fume extraction at the workplace, care of the skin and the wearing of eye protection.

Safety Data Sheet
When using this product, the information and advice given in our **Safety Data Sheet** should be observed. Due attention should also be given to the **precautions** necessary for handling chemicals.

Labeling
According to all the data at our disposal, Acronal® 7642 does not need to be labeled as a dangerous substance or preparation as defined in the relevant local directives according to their current status.

Storage

Acronal® 7642 must not be allowed to come into contact during storage with metals or alloys that are susceptible to corrosion. During storage it is particularly important to ensure that containers are closed tightly; in storage tanks the air must always be saturated with water vapor. Undue heating must be avoided, as much exposure to frost.

Given adequate tank and storage hygiene Acronal® 7642 can be kept for about nine months at 10-35ºC.

To prevent problems with microorganisms we recommend post-stabilizing the product with biocides for storage.

Contact Us

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