Product Information

BASF
We create chemistry

Acronal® ECO 702 ap

Chemical Nature:

Emulsion polymer of acrylic ester and styrene

Benefits

- Freshly painted room can be reoccupied in less than an hour after painting
- Low maintenance coating
- Stain beading effect
- Formulation of environmental friendly paint

Features

- Low odor emulsion polymer
- Stain and burnish resistance
- Outstanding water and alkali resistance
- APEO and formaldehyde free

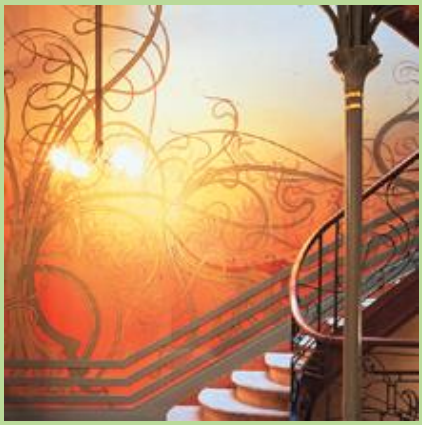
Emulsion polymer for low odor stain resistant premium interior paint

Acronal® ECO 702 ap is an anionic emulsion polymer with a medium viscosity. It consists of small, finely divided particles. Its compatibility with pigments and extenders is excellent, and it has very high binding power for pigments. Unpigmented films of Acronal® ECO 702 ap are tack-free at room temperature. Films formed by Acronal® ECO 702 ap are clear, flexible and glossy, they have extremely high water resistance, and they are very resistant to saponification.

Properties			
Product specification*	Solids content	%	50 ± 1
	pH value		6.5 – 8.5
	Viscosity at 23 °C, RVT Sp2/20 rpm (DIN EN ISO 2555)	mPa·s	100 – 1000
Other properties of dispersions	Minimum film-forming temperature (ISO 2115)	°C	approx. 21
	Density	g/cm³	approx. 1.02
	Resistance to frost	ºC	≤ 0
	Type of emulsion	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.

Acronal® ECO 702 ap



Application

Areas of application
General purpose binder for low odor, stain resistant interior paints.

Processing
It is advisable to disperse the pigments and extenders with wetting and dispersing agents such as Dispex® AA 4030 and water-soluble polyphosphates in an alkaline medium in advance before the emulsion polymer is added. It is only when products with very high viscosity are being mixed in low-speed mixers that Acronal® ECO 702 ap should be added together with the wetting and dispersing agents.

Acronal® ECO 702 ap has high pigment binding power, and 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, diurethane thickener (such as Rheovis® AS 1125) and bentonite can be used. The choice of thickener depends on whether the coating is expected to be free-flowing or more thixotropic.

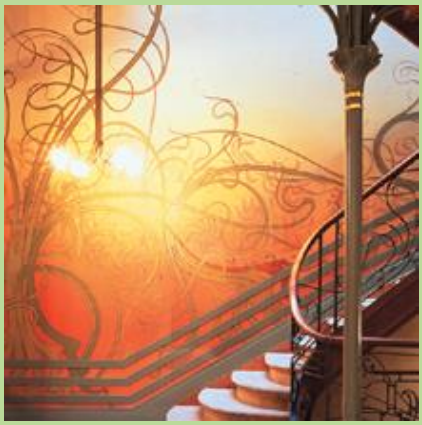
Solvents need to be added in order to enable the polymer to form a uniform film at temperatures below ambient temperature. It is usually sufficient to add these solvents at a level of 2 %, expressed as a proportion of the total formulation. Short-chain alcohols and glycols improve the freeze-thaw resistance of paints, but they cannot be used to lower the film-forming temperature. If possible, solvents should not be added direct to the emulsion polymer, they should be mixed with the pigment paste and then added.

Like all finely divided emulsion polymers, Acronal® ECO 702 ap has a tendency to foam. It is therefore necessary to add a commercial defoamer at the level of 0.3 – 1 %. Trials should be carried out to test the effectiveness of the defoamer.

Although Acronal® ECO 702 ap itself is resistant to microorganisms in the form in which it is supplied, preservatives need to be added to products formulated with Acronal® ECO 702 ap to protect them from attack by microorganisms over long periods in storage. Trials should always be carried out to test the compatibility and efficacy of the preservatives.

Customers have to carry out their own trials when developing and processing products based on Acronal® ECO 702 ap. The compatibility of Acronal® ECO 702 ap with other ingredients of formulations, its effect on mixing processes 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.

Acronal® ECO 702 ap



Safety

General
The usual precautions for handling chemicals must be observed. These include the measures set out in the guidelines of the organisations 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® ECO 702 ap does not need to be labelled as a dangerous substance or preparation as defined in the relevant local directives according to their current status.

Storage

Acronal® ECO 702 ap must not be allowed to come into contact during storage with metals or alloys that are susceptible to corrosion. It is important to ensure that containers are kept tightly sealed, and the headspace of bulk storage tanks must be kept saturated with water vapour. This product must not be exposed to high temperatures, and it must be protected from frost.

Acronal® ECO 702 ap has a shelf life of six months at 10 – 30 °C, provided due attention is paid to the hygiene of tanks and storage facilities..

We would recommend treating this product with a biocide in order to prevent problems with micro organisms from occurring during storage and processing. Further details are given in our leaflet on “The handling and storage of polymer dispersions”.

For further information please contact:

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