Product Information
Acronal® ECO 7082 ap

Polymer dispersion for the manufacture of stain, scrub and wash resistant low odor architectural paints

Aqueous copolymer dispersion, free from plasticizers and solvents, with very high resistance to household stains. Acronal® ECO 7082 ap does not contain APE surfactants. It exhibits high resistance to scrubs. Interior paints formulated with Acronal® ECO 7082 ap are characterized by excellent stain, scrub and wash resistance.

Chemical Nature:

Polymer dispersion of acrylic esters

Benefits

- Suitable for low odor, low VOC paints
- Earlier reoccupation of painted rooms
- Excellent stain, wash, and burnish resistance
- Excellent scrub resistance

Features

- Pure acrylic polymer
- APEO surfactant free
- Self crosslinking
- Low odor polymer

Properties			
Product specification*	Solids content	%	50 ± 1
	pH value	pH	7.0 – 8.5
	Viscosity at 23 °C, Brookfield RVT 3/100 (DIN EN ISO 2555)	mPa·s	250 – 1000
Other properties of dispersions	Minimum film-forming temperature (ISO 2115)	°C	13
	Density (ISO 2811-1)	g/cm^3	approx. 1.04
	Resistance to frost	ºC	≤ 0
	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® ECO 7082 ap is ideal for low VOC and low odor paints with premium interior paint performance. Paints formulated with Acronal® ECO 7082 ap display a high level of resistance to household stains, scrubbing, washing and dry burnish resistance. Stain resistance refers to the ability to resist the penetration by and allow removal of household stains such as wine, hand marks, coffee, mustard and inks. Paints based on Acronal® ECO 7082 ap display excellent wash resistance because the gloss change after the film is washed is very low. This, along with excellent stain resistance and high scrub resistance, ensures that dirty paint surfaces can be easily cleaned without leaving a mark or damaging the film. Acronal® ECO 7082 ap can be formulated in gloss to flat paints.

Processing

Products formulated with Acronal® ECO 7082 ap can be made up in the usual manner with a high speed mixer. Dispex® CX 4320 is recommended for dispersing titanium dioxide pigments in propylene glycol or propylene glycol/water. Dispex ® AA polyacrylate types can be used as a co-dispersant or sodium / potassium polyphosphates may also be included in the dispersant phase.

Associative thickeners, e.g. Rheovis® PU 1280, are suitable for adjusting the viscosity and flow, because they do not give rise to a yield point in the rheological characteristic and Acronal® ECO 7082 ap displays high response to thickeners. These thickeners may be combined with hydroxyethyl cellulose or modified cellulose thickeners in order to reduce any tendency of sagging and to prevent pigment flocculation, although cellulose based thickeners may reduce the stain and wash resistance of the paint.

Like all dispersions Acronal® ECO 7082 ap tends to foam, therefore in formulations, a defoamer is usually required. The defoamer can be recommended in proportions of 0.2 - 1%, but their suitability should be tested first. Propylene glycol is suitable for increasing the wet edge time but temporarily impairs the resistance to blocking and increases the sensitivity to water. Addition of propylene glycol will also increase the odor of coatings. Selection of a higher boiling point coalescent will assist in the wet edge time of paints based on Acronal® ECO 7082 ap.

Preservatives should be added to products made up from Acronal® ECO 7082 ap® ap, in order to ensure adequate protection against microbial attack during long storage periods. Their compatibility and effectiveness however should be tested also. Tinting and color can be achieved using standard pigments used in Architectural coatings, including BASF's range of Xfast® easy disperse pigment powders and Luconyl® pigment pastes. In all cases the compatibility with and effects on the performance of the coatings should be thoroughly checked.

Paints formulated without non ionic surfactants and using Acronal® ECO 7082 ap will still display good tinter acceptance. This is due to the surfactants used in the Acronal® ECO 7082 ap. Removal of the non ionic surfactants from standard formulations will decrease the water sensitivity of the paint and improve the stain and wash resistance. Surfactants should only be added if tests show them to be required (e.g. poor tinter acceptance).

The stain, burnish, wash and scrub resistance of Acronal® ECO 7082 ap can be further improved with good formulating. Our technical department has extensive experience in this area and starting point formulations using Acronal® ECO 7082 ap are available from BASF. Manufacturers must perform their own careful tests in developing products containing Acronal® ECO 7082 ap, because tests on our part cannot embrace the great variety of factors that may influence results during manufacture and application, e. g. the mutual compatibility of the ingredients, the mixing mechanisms, and the adhesion to various substrates. Testing should include storage at ca. 50°C in order to ensure that the viscosity remains stable at this temperature.

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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 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 7082 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 7082 ap must not be allowed to come into contact with metals or alloys that are susceptible to corrosion. It is very important to ensure that containers are kept tightly closed or that the airspace in storage tanks is kept saturated with water vapor. Exposure to frost or sources of intense heat must be avoided.

Acronal® ECO 7082 ap contains sufficient preservative for transportation. More preservative must be added during subsequent storage to protect the material against microbial attack. Tank hygiene measures must also be adopted.

Acronal® ECO 7082 ap has a shelf life of approximately nine months from date of manufacture at temperatures between 10°C to 30°C.

Contact Us

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