STYACRYL VA 30

Polymer Emulsion

Version: 2.1

TDS EU/EN

Characteristics

Styacryl VA 30 is a non-plasticized aqueous copolymer dispersion based on Acrylic (meth) acrylic acid esters and vinyl groups. Styacryl VA 30 offers a unique balance between elasticity and hardness that makes it also very suited for use of many types of coatings.

General Features

Styacryl VA30 is emulsion with low MFFT designed for low VOC including:

Δ Exterior paints

Δ Interior paints

Δ Masonry paints

With medium until high pigment volume concentrations, the emulsion offers excellent outdoor durability, low water uptake and good wet adhesion, which makes it the binder of choice for coalescent free façade paints.

Physical Properties

Supply Specification	Method *	Unit	Value
Solids content (130 °C, 30min)	ISO 3251	%	49±2
Brookfield viscosity (25 °C ,3/20)	ISO 2555	mPa.s	5000 ±2000
pH value	ISO 976		6.0-8.0

Film Properties

Further Typical Properties **	Method *	Unit	Value
Particle size		µm	approx. 0.12
Minimum film forming temperature	ISO 2115	°C	0
Glass transition temperature	ISO 16805	°C	approx. 7
Appearance of the film	Flexible, clear and tack free		

*According to this standard.

Usage

The usual titanium dioxide and colored pigments as well as fillers or extenders may be used for the formulation of paints. To ensure adequate storage stability long-term storage trials are recommended at any rate, especially when fillers and colored pigments with a large specific surface area are chosen. In addition to the widespread used polyphosphates the salts of low molecular weight polyacrylic acids working as dispersing agents should also be used to achieve further stability.

Depending on the nature of the pigments and extenders, the required quantity is in range between 0.1 and 0.4 % active substance relative to the pigment/extender mixture. Many thickeners are usable to adjust the desired viscosity of the paint and to improve its process ability. Very good results are achieved by employing cellulose ethers with retarded swelling and medium to high molecular weight. Associative PU or acrylic thickeners can be used alone or in combination. Many commercially available defoamers can be included in order to prevent excessive foaming in the paints. Trials must be carried out to determine the most suitable grades and the correct concentration. All colored pigments should be tested for their suitability for exterior paints, especially in the case of tinted color tones.

Preservation and Storage

The dispersion contains some initial preservatives to prevent attack by microorganisms. In order that the product is also sufficiently protected against microbial contamination during further storage in opened drums, tanks or other storage facilities a suitable preservative should be added despite our preliminary preservation measures and the tanks and pipe work should be kept adequately clean. Styacryl VA 30 has minimum shelf life of 6 months from the dispatch date, provided the product is at temperatures between 5 °C and 35° C, avoiding frost and direct sunlight. Furthermore, it must be ensured that already opened drums and containers are always tightly closed. For bulk storage, additional conditions like the addition of preservatives or frequent stirring are technically applicable and recommended. To remove any skins or lumps that could have been formed during longer storage of the dispersion due to its film forming nature a filtration or sieve process is recommendable before further processing.
The technical data ascertained by our quality control laboratory at the time of product release may vary according to the storage time and storage conditions and may deviate from the original values.

Product Safety and Environmental Protection

The usual protective measures employed during the handling of aqueous polymer emulsions should be observed. Further product safety information can be obtained from our material safety data sheet which is available on request.