

STYACRYL A120

Polymer Emulsion

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TDS EU/EN

Characteristics

STYACRYL A120 is APEO free aqueous copolymer emulsion based on Acrylic and Methacrylic Acid Esters.

General Features

STYACRYL A120 is raw material for the paints and coatings industry, including:

- △ Exterior Gloss Paints
- △ Wood stain varnishes
- △ External insulating system
- △ Clear Coats

Advantages

- ❖ Excellent outdoor durability.
- ❖ Low dirt-pickup. Combines low water uptake with good hardness.
- ❖ Adheres to mineral, wood and metal substrates.
- ❖ Use in clear and pigmented coatings

Physical Properties

Supply Specification	Method *	Unit	Value
Appearance	Milky white emulsion		
Solids content (130 °C, 30 min.)	ISO 3251	%	46±1
Brookfield viscosity (25 °C,2/20)	ISO 2555	mPa.s	150 ±100
pH value	ISO 976		7.0-9.0
Emulsion type , stabilization	Anionic , surfactant		

Film Properties

Further Typical Properties	Method *	Unit	Value
Particle size	Nano-sizer	µm	approx.0.12
Minimum film forming temperature	ISO 2115	°C	21
Glass transition temperature	ISO 16805	°C	18
Appearance of the film	Hard , flexible, clear and tack free		

*According to this standard.

Usage

The minimum film forming temperature of the Styacryl A120 will be reduced by adding sufficient amounts of coalescing agents (and in some cases also plasticizers) which must be done with due care. Water miscible solvents like propylene glycol improve the frost resistance.

The usual titanium dioxide and colored pigments as well as fillers or extenders may be used for the formulation of the coating systems. Depending on the nature of the pigments and extenders, the required quantity is in range between 0.1 and 0.4 % active substance of dispersing agent relative to the pigment/extender mixture.

Many thickeners are usable to adjust the desired viscosity of the coatings.

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.

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 A120 has minimum shelf life of 6 months from the dispatch date, provided the product is at temperatures between 5 °C and 30 °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.

This information is based on our present state of knowledge and is intended to provide general notes on our products and their uses. However, we do not assume any liability whatsoever for the accuracy or completeness of the information herein. It should therefore not be constructed as an expressed or implied warranty of specific properties of the products or the suitability for a particular use. Any existing industrial property rights must be observed. The quality of our products is governed by our General Conditions of Sale. In every case we urge and recommend that purchasers before using any product in full-scale production make their own test to determine to their own satisfaction whether the product is of acceptable quality and is suitable for their particular purposes under their own operating conditions