

Celvolit® 1602

Technical Data Sheet

Version 6- Issue 08/2013

Characteristics

Celvolit®1602 is a copolymer dispersion of vinyl acetate and ethylene.

The dispersion is free from surfactants based on alkyl phenol ethoxylate.

Stabilization

Surfactants and protective colloids.

Recommended Application Areas

- Interior wall and ceiling paints
- Interior paints with low VOC-content

Specification	Method	Unit	Value
Solids content	DIN ISO 1625; 2 h; 105°C	%	54 – 56
Brookfield viscosity	DIN EN ISO 2555; spindle nr. 2; 60rpm; 25°C; Brookfield viscometer LVDV	mPa·s	100 – 700
pH value	DIN ISO 976		4 – 5

These technical data are determined for each lot before its release by our quality control laboratory.

Typical Property	Method	Unit	Value
Particle size	Measured with "Laser Diffraction Technique"	µm	approx. 0.16
Minimum film forming temperature(MFFT)	DIN ISO 2115	°C	0
Glass transition temperature Tg	DIN 53 765; DSC; heating rate 10 K/min	°C	approx. 12
Film* Appearance	slightly opaque, soft, tough		

* Dried under standard atmospheric conditions at 23 °C and 50 % relative humidity (DIN EN 23 270).

These technical data are solely to describe the product. They are not subject to constant monitoring or part of specification.

Your future is our focus...worldwide.

Applications

Celvolit®1602 has very good pigment binding power and can be used universally in mattpaints as well as in semi-gloss interior paints with gloss 20 (60°).

Versatile and easy to formulate, Celvolit®1602 can be formulated with excellent performance and the cost efficiency of the emulsion for both the DIY and contractor markets. Due to its good pigment binding capacity it is possible to formulate paints of 75% PVC with good scrub resistance

Celvolit®1602 can simply replace normal binder in conventional interior paint, it can achieve same or better performance with zero or less coalescent, which give possibility of total formula cost saving.

Processing

When Celvolit®1602 is dried at temperatures above 0 °C the dispersion forms a clear and elastic film without any addition of solvents or plasticizers. The film has good resistance towards water and alkaline solutions.

Celvolit®1602 can be easily formulated in the normal way with e.g. low molecular weight polyacrylic acids as dispersing agents and cellulose derivatives as thickeners. Alternatively cellulose derivatives in combination with associative acrylic or polyurethane thickeners can be used to improve the rheology profile.

Celvolit®1602 is a universal binder for indoor paints. It can be formulated into paints with good wet scrub resistance even at a high pigment volume concentration (PVC), and semi-gloss paints with good blocking resistance can also be made. Please note that the blocking resistance is strongly dependant on the formulation of the paint.

Preservation and Storage

When the dispersion is manufactured a preservative is added to prevent the growth of microorganisms. Nevertheless, unfavourable storage conditions may cause risks of microbial contamination. Storage tanks and pipe work should therefore be kept adequately clean.

Celvolit®1602 should not be stored for longer than six months, at a storage temperature between 5 and 35°C. The emulsion must be protected from frost and from direct exposure to sunlight. To ensure safe storage of Celvolit®1602, containers should be well sealed to prevent evaporation of water and the formation of skin on the surface.

The technical properties of the emulsion may change as a result of storage time and storage conditions. This can lead to deviations from the given specifications.

Industrial Safety and Environmental Protection

Celvolit®1602 is water-based and not classified as a hazardous substance within the meaning of the current Dangerous Substances Regulations. Nevertheless general safety precautions in the processing of polymer dispersions should be observed. Protective gloves and goggles should be worn and working areas should be adequately ventilated.

A safety data sheet is available on request.