

Acronal[®] 4702

Chemical Nature

Aqueous styrene-acrylate copolymer dispersion for modifying hydraulic binders

Properties

Typical Properties

Solids content	%	~ 50.0
pH		~ 8.0
Apparent viscosity at 23 °C (Brookfield RV, Spindle #4, at 50 rpm)	mPa s	400 – 2300 (prelim)

Other properties of the dispersion

Viscosity at 23 °C (shear rate, 250 s ⁻¹)	mPa s	140 – 200
Density	lbs/gal g/cm ³	ca 8.6 ca. 1.03
Average particle size	µm	ca. 0.1
Plasticizer content		free from plasticizer
	°C	<1 min.
Dispersion type		anionic
Plasticizer content		free from plasticizer
Sensitivity to frost	°F	below 32
	°C	below 0

* The above values should not be taken as specification.

Application

Fields of application

Acronal 4702 is used for modifying hydraulic binders, especially cement mixtures. It imparts an extremely liquid consistency to these compounds, which has the advantage that products can be formulated with much lower water content.

Acronal 4702 brings about a substantial increase in flexural strength even if the water content is not reduced. Acronal 4702 is also used to formulate cementitious and non-cementitious floor screeds and ceramic tile adhesives.

Processing

The required effects usually can be obtained by adding Acronal 4702 at 10 - 20% dry weight, calculated on the weight of cement in the mix.

Acronal 4702 already contains a defoamer for use in combination with hydraulic binders. If additional defoamer is required, it is advisable to carry out trials with 0.3 - 1% defoamer.

It must be borne in mind that the use of some conventional thickeners in cement mixtures may cause excess rigidity and unsatisfactory setting. This may affect the strength properties, especially under wet conditions.

Safety

General

The usual safety precautions when handling chemicals must be observed. These include the measures described in Federal, State and Local health and safety regulations, thorough ventilation of the workplace, good skin care and wearing of protective goggles.

Safety Data Sheet

All safety information is provided in the Safety Data Sheet for Acronal 4702.

Storage

Please refer to the "Handling and Storage of Polymer Dispersions" brochure.

Important

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