

Adhesives

Technical Data Sheet

Acronal[®] 4120 (old: Acronal Optive[®] 120)



We create chemistry

Chemical Nature

Aqueous dispersion of an acrylic- methyl acrylic co-polymer which when dried yields a film with very good optical clarity

Properties

Typical Properties

Solids	%	~ 50.0
pH		~ 8.0
Viscosity at 23 °C (Brookfield RV, Spindle #2 at 20 rpm)	cps	3000 – 8000

Other properties of the dispersion

Density at 23 °C	lb/gal g/cm ³	ca. 8.84 ca. 1.04
Type of dispersion		anionic
Average particle size	µm	ca. 01
Freeze/thaw stability		not stable

Properties of the film

Bulk Density	g/cm ³	ca. 108
Glass transition temperature (DSC)		ca. 22
Water absorption (After 24 hrs. immersion in water)	%	ca. 12
Tensile strength*	psi N/mm	ca. 1400 ca. 10
Elongation at break*	%	300
Appearance		transparent, colorless
Surface		tack free

* These typical values should not be interpreted as specifications.

Applications

Features

Acronal[®] 4120 has been recommended for use in industrial adhesive applications where ultimate adhesive film clarity may be necessary. Because of its very low VOCs Acronal[®] 4120 is suggested for use in adhesive applications where residual odor is objectionable. It offers good adhesion to both plastic and cellulosic substrates.

Processing

Most fine particle size dispersions exhibit a tendency for foam formation. It thus becomes necessary to add a defoamer in the proportions recommended by the manufacturer (usually 0.3 – 1%). The efficiency of the antifoams should be checked by experimentation.

Products containing Acronal[®] 4120 should be blended with a preservative in order to protect them from the attack of microorganisms. The suitability of the preservative must be determined by trials and regular inspection.

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.

Material Safety Data Sheet

All safety information is provided in the Material Safety Data Sheet for Acronal® 4120.

Storage

Acronal® 4120 has a shelf life of six months from delivery date, provided it is stored in accordance with the "Handling and Storage of polymer dispersions" brochure. Technical information regarding the storage of BASF polymer dispersion products is available upon request.

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