

Acronal[®] 4040

Chemical Nature

Aqueous styrene-acrylate copolymer dispersion for the manufacture of concrete cure and seal coatings.

Properties

Typical Properties

Solids content	%	ca. 45
pH		ca. 7
Viscosity at 73 °F (Brookfield LVT, Spindle #3, at 60 rpm)	cps	ca. 50

Other properties of the dispersion

Density at 23 °C	lbs/gal g/cm ³	ca. 8.6 1.03
Type of dispersion		anionic
Odor		Low
Freeze-thaw stability	0 °F	not stable

Properties of the film

Surface		tack-free
Glass transition temperature (DSC)	°C	ca. 39

* The above values should not be taken as specification.

Application

Features

Acronal 4040 is a low odor, APEO-free styrene-acrylate copolymer dispersion for use in concrete cure and seal coatings. Acronal 4040 can be formulated into fast drying coatings which then exhibit excellent ASTM C309 water retention, concrete adhesion, coating appearance and water blushing resistance.

Processing

Due to its high glass transition temperature (T_g), a film forming aid is required in formulations to ensure desired polymer particle coalescence (i.e. film formation). Formulations containing Acronal 4040 are low in VOC's and after application result in dried films that develop very good hardness, abrasion resistance and acid/alkali resistance.

Although Acronal 4040 is protected from attack by microorganisms, preservatives must be added to the produced formulations in order to ensure that their quality remains unimpaired over long storage periods. Prior experiment is essential for checking their compatibility and efficiency.

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 4040.

Storage

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

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