

Acronal[®] NX 4627 X

Chemical Nature

Aqueous styrene-acrylate copolymer dispersion used to formulate asphalt emulsion seal and bond coats.

Properties

Typical Properties

Solids content	%	~ 48.0
pH		~ 7.0
Viscosity at 23 °C (Brookfield RV, Spindle #5, at 50rpm)	cps	~ 100 – 500

Other properties of the dispersion

Density at 23 °C	g/cm ³	ca. 1.03
Freeze/thaw stability		not resistant

Properties of the film

Appearance		Transparent
Surface		not tacky
Tensile Strength	psi	ca. 960
Elongation at break	%	ca. 460
Glass transition temperature T _g (DSC)	°C	ca. 12
Water Absorption (after 24hr immersion in water)	%	ca. 5

* The above values should not be taken as specification.

Application

Features

Acronal NX 4627 X is a very effective additive for asphalt emulsion seal, tack or bond coat formulations. Its use in bond (tack) coat formulations improves bonding of the new asphalt layer to the existing, underlying pavement layer. The use of the Acronal NX 4627 X in these formulations can also assist in reducing vehicular “tracking” of the applied tack/bond coat just prior to new pavement application.

Processing

When used as an additive for asphalt emulsions, Acronal NX 4627 X may be added to a solution feed which is then used in asphalt emulsion production or post-added directly to an asphalt emulsion. Its unique composition enables it to be compatible in both anionic as well as cationic formulations. The typical formulation will contain approximately 3-6% active weight copolymer on asphalt emulsion residue. Customers must conduct their own trials when developing and processing products based on Acronal NX 4627 X. The compatibility and miscibility with other emulsions or latex polymers and other formulating materials are affected by a variety of factors which are too numerous for BASF to take into account in our own trials. This includes the viscosity stability of the formulated product in storage.

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 NX 4623.

Storage

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

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