

Acronal[®] NX 4627 X

Polymer Dispersions for Construction

Chemical nature Aqueous styrene-acrylate copolymer dispersion used to formulate bitumen emulsion seal and bond coats

Properties

Physical form Liquid, dispersion

Technical data

(no supply specification)

Solids content	EN ISO 3251	~ 48 %
pH value	EN ISO 976	~ 7.0
Viscosity, dynamic (at 23 °C, 100 1/s)	EN ISO 3219	100 - 500 mPa s
Density		~ 1.03 g/cm ³
Tg		~ 12 °C

Properties of the film

Appearance	transparent
Surface	not tacky
Tensile strength	~ 960 psi
Elongation at break	~ 460 %
Water absorption (after 24h immersion in water)	~ 5 %

Application

Features

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

Applications

Acronal® NX 4627 X is used in the following applications:

- Tack/bond coat
- Fog seal

Processing

When used as an additive for bitumen emulsions, Acronal® NX 4627 X may be added to a solution feed which is then used in bitumen emulsion production or post-added directly to a bitumen 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 bitumen 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.

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

Storage

Storage

Acronal® NX 4627 X 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. The container must be protected from frost and prolonged exposure to temperatures higher than 40 °C. The optimal storage temperature corresponds to normal room temperature approx. 18 - 21°C. The storage inside closed buildings is to be preferred to avoid larger temperature fluctuations. Further technical information regarding the storage of BASF polymer dispersion products is available upon request.

Safety

When handling this product, please comply with the advice and information given in the safety data sheet and observe protective and workplace hygiene measures adequate for handling chemicals.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights, etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. The agreed contractual quality of the product results exclusively from the statements made in the product specification. It is the responsibility of the recipient of our product to ensure that any proprietary rights and existing laws and legislation are observed.

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