Construction

Technical Data Sheet

Acronal® NX 4771

BASF
We create chemistry

Chemical Nature	**Aqueous acrylate copolymer dispersion for exterior insulation finishing systems**

Properties

Typical Properties	Solids content, weight	%	~ 47.0
	pH		~ 8.0
	Viscosity at 23 °C (Brookfield RV, Spindle #2, at 20 rpm)	mPa s	ca. 700
Other properties of the dispersion	Density	lbs/gal	ca. 8.84
	Film-forming temperature	°F	ca. 72 min.
		°C	ca. 22
	Dispersion type		anionic
	Plasticizer content		free from plasticizer
	Freeze/Thaw Stability		Not resistant
Properties of the film	Glass transition temperature Tg (DSC)	°C	ca. 19
	Water absorption (After 24 hrs. immersion in water)	%	ca. 9
	Mechanical strength*		
	Tensile strength	psi	ca. 1640
	Elongation at break at 23 °C	%	ca. 340
	Appearance		colorless, transparent
	Surface		tack free

* These figures should be taken for comparison purposes only. All that can be obtained from it is an idea of the order of magnitude.

Applications

Features

Acronal® NX 4771 is an all-acrylic latex dispersion that is suitable as a binder for EIFS basecoats and topcoats. EIFS topcoat finishes formulated with Acronal® NX 4771 show good water resistance, easy workability, and increased resistance to dirt pick-up, freeze-thaw resistance, excellent color retention and weatherability. Films obtained from it are tough, flexible, tack-free at room temperature and very resistant to water absorption. Since basecoat stability can vary based on the type of cement and conditions of use, dispersing aids may be needed to attain desired workability.

Processing

Various thickeners and rheology modifiers may be added to regulate the viscosity and flow and to improve the brushability. Alkali-swellable thickeners represent the most widely used class of thickeners that are suitable for EIFS topcoats.

Small amounts of nonionic surfactants can also aid in improving stability, but tests for compatibility and storage stability should be carried out prior to their use.

In the event it becomes necessary to reduce the air in the formulation, defoamers in the proportions recommended by the manufacturer (usually 0.3 - 1%) may be required. The efficiency of the antifoams should be checked by experimentation.

Small amounts of coalescents should be included in the formulations in order that a satisfactory film can be formed at low temperatures. Suitable solvents for this purpose are glycol ethers and their acetates, mineral spirits and Texanol® either individually or mixed together. The maximum suggested level would be 2% based on the total formulation. Solvents that are freely miscible with water (e.g. lower alcohols or glycols) are unsuitable as coalescents but improve the freeze thaw stability of the formulations. Water miscible, higher boiling solvents (e.g. propylene glycol and diethylene glycol monobutyl ether) lengthen the wet edge time but temporarily slow the resistance to blocking and increase the sensitivity to water.

Preferably concentrated solvents and thickeners should be premixed with the pigment paste or diluted with water prior to incorporating them into the formulation.

Products containing Acronal® NX 4771 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 inspections.

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® NX 4771.

Storage

Acronal® NX 4771 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.

Important

The descriptions, designs, and data contained herein are presented for your guidance only. Because there are many factors under your control which may affect processing or application/use it is necessary for you to make appropriate tests to determine whether the product is suitable for your particular purpose prior to use. **NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, OR DATA MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, DATA OR DESIGNS PROVIDED BE PRESUMED TO BE A PART OF OUR TERMS AND CONDITIONS OF SALE**. Further, you expressly understand and agree that the descriptions, designs, and data furnished by BASF hereunder are given gratis and BASF assumes no obligation or liability for same or results obtained from use thereof, all such being given to you and accepted by you at your risk.

Acronal is a registered trademark of BASF Group.

© BASF Corporation, 2015

BASF Corporation is fully committed to the Responsible Care® initiative in the USA, Canada, and Mexico.
For more information on Responsible Care® go to:
U.S.: www.basf.us/responsiblecare_usa
Canada: www.basf.us/responsiblecare_canada
México: www.basf.us/responsiblecare_mexico

BASF Corporation
Dispersions and Pigments
11501 Steele Creek Road
Charlotte, North Carolina 28273
Phone: (800) 251 – 0612
Email: edtech_info@basf.com
www.basf.us/dpsolutions