

Acronal® 4074 X

Chemical Nature

Aqueous styrene-acrylate copolymer dispersion for the manufacture of construction grouts, adhesives and waterproofing membranes

Properties

Typical Properties

Solids content	%	ca. 45
pH		ca. 7.5
Viscosity at 73 °F (Brookfield RV, Spindle #2, at 20 rpm)	cps	ca. 350

Other properties of the dispersion

Density at 23 °C	lbs/gal g/cm ³	8.6 1.03
Type of dispersion		anionic
Particle Size	nm	< 100
Odor		Low
Neutralization		No ammonia added
Freeze-thaw stability	0 °F	not stable

Properties of the film

Surface		tack-free
Glass transition temperature (DSC)	°C	ca. 37

Application

Features

Acronal 4074 X is a low odor, APEO-free, fine particle size copolymer dispersion recommended for the production of construction grouts, adhesives and waterproofing membranes. 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). Dry films produced from Acronal 4074 X are strong and highly water resistant.

Processing

Although Acronal 4074 X 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. monobutyl ether acetate, butoxyethyl acetate, Texanol®, or mixtures of these materials. Diethylene glycol monobutyl ether and Texanol®, for example, simultaneously prolong the open assembly time.

Lower alcohols and glycols improve the resistance to frost, but generally do not reduce the film-forming temperature.

Although Acronal 296 D na already exhibits high viscosity characteristics, a thickening agent is generally added for adjusting the viscosity of the end product. Polyacrylic acid types (e.g. Latekoll® D), Collacral® VL, Collacral® PU, cellulose ethers or other mineral thickening agents can be used for this purpose. These products not only increase the yield point, but also impart more or less pronounced pseudoplasticity to the end products.

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 4074 X.

Storage

Storage should be 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

WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, THEY ARE PROVIDED FOR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, BASF RECOMMENDS THAT THE READER MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR A PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESCRIPTIONS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF BASF'S TERMS AND CONDITIONS OF SALE. FURTHER, THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY BASF HEREUNDER ARE GIVEN GRATIS AND BASF ASSUMES NO OBLIGATION OR LIABILITY FOR THE DESCRIPTIONS, DESIGNS, DATA OR INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT THE READER'S RISK.

Acronal is a registered trademark of BASF Group.

© BASF Corporation, 2023



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 Resins
11501 Steele Creek Road
Charlotte, North Carolina 28273
Phone: (800) 251 – 0612
Email: CustCare-Charlotte@basf.com
www.basf.us/dpsolutions