

Acronal[®] 5041

Polymer Dispersions for Construction

Chemical nature Aqueous dispersion of styrene-acrylic ester copolymer (silanized).

Properties

Physical form Liquid, dispersion

Technical data

(not supply specification)

Solid content	DIN EN ISO 3251	51.0 – 53.0 %
pH value	DIN ISO 976	7.2 – 8.0
Viscosity, dynamic	DIN EN ISO 3219 (23 °C, 100 1/s)	40 – 300 mPa.s
Glass transition temperature (T _g)		~ 8 °C
MFFT	DIN ISO 2115	~ 3 °C
Initial melting point ¹		≤ 20 °C

¹ According to Commission Regulation (EU) 2023/2055 of 25 September 2023 amending Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as regards synthetic polymer microparticles.

The initial melting point was determined according to the position paper of the European Polymer Dispersion and Latex Association (EPDLA's position paper on polymer dispersions, redispersible polymer powders made thereof and synthetic polymer microparticles) from December 2024 and the method described therein.

Application

Areas of application

Because of its low content of volatile organic compounds (VOCs) Acronal® 5041 is suitable for the manufacture of low-emission building products. No solvents are needed for film formation.

The good adhesion to different substrates, also after storage under water, and the fast-drying behavior makes Acronal® 5041 especially suitable for mastic tile adhesives and ETICS adhesives.

With Acronal® 5041 it is possible to formulate universal primer and bonding aids for absorbent and nonabsorbent substrates (e.g. even glazed tiles). The fine particles of the dispersion result in deep penetration into porous substrates. The low water absorbency of the dispersion film makes it possible to seal the surface effectively. At the same time, the high pigment binder power of Acronal® 5041 stabilizes dusty surfaces. The high inherent strength of the dispersion film has a very good adhesion promoting effect.

Other typical uses are membranes with high resistance to water (e. g. mastic wet room coating) and water vapor (e. g. damp proofing)

Processing

Acronal® 5041 can easily be incorporated in formulations with all standard mineral fillers. If required, the stability of highly filled formulations can be ensured with small quantities of dispersants such as Dispex® CX 4320 or Dispex® AA 4135.

The viscosity level can be adjusted with polyacrylates such as Rheovis® AS 1125, Rheovis® AS 1130 or Rheovis® HS 1169 and cellulose ethers. Standard commercial antifoams such as Foamaster® NO 2306 or FoamStar® SI 2210 can be used to suppress foaming. In general, it is sufficient to add 0.1 – 0.3 % antifoam in relation to the adhesive mixture.

Although Acronal® 5041 is protected against microbial attack, preservatives must still be added to the finished products to ensure consistent quality even after a long storage time.

The compatibility and effectiveness should be checked out in appropriate preliminary tests.

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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