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Basonat® HW 3280 MBA

General

Basonat® HW 3280 MBA is a water-emulsifiable polyfunctional polyisocyanate for fast drying water-based 2K polyurethane coatings.

Key features & benefits

- 80% solution in 3-methoxy-1-butyl acetate (Butoxyl®1)
- combination of emulsifier-modified hexamethylene and isophorone diisocyanate oligomers
- improves physical drying and hardness development
- increased final hardness level at high elasticity
- good weather resistance
- good compatibility with both primary and secondary dispersions
- good compatibility with coalescent solvents
- good chemical resistance after full curing

Chemical nature

emulsifier-modified isocyanurate based on isocyanurated hexa-methylene diisocyanate (HDI) and isophorone diisocyanate (IPDI).

Properties

Appearance

translucent liquid

Typical characteristics
(should not be interpreted as specifications)

NCO content	11.5 - 12.5%
non-volatile fraction	78 - 82%
viscosity at 23°C (73°F) D=100s^{-1}	800 - 1400 mPa.s
platin cobalt color number (Hazen)	≤ 80

Application

Basonat® HW 3280 MBA is a solution of an emulsifier-modified polyfunctional isocyanurate combination in 3-methoxy-1-butyl acetate.

Basonat® HW 3280 MBA is used as a hardener for water-based 2K PU Coatings.

Basonat® HW 3280 MBA is used in combination with polymer dispersions: OH-functional acrylic dispersions or polyurethane dispersions. In combination with water-based functional binders it allows to formulate eco-friendly and high durable high performance 2K PU industrial coatings. In an aqueous environment an ideal stoichiometric reaction of OH and NCO groups cannot be expected.

Processing

Basonat® HW 3280 MBA can be stirred directly into the dispersion. An ideal stoichiometric reaction of OH and NCO groups cannot be expected.

In primary dispersions, Basonat® HW 3280 MBA ideally crosslinksat a stoichiometric proportion of 100 % of OH groups of the dispersion on the NCO content of the polyisocyanate.

A stoichiometric proportion of 150 parts of polyisocyanate on 100 parts of polyol (index 150) is usually adjusted in secondary dispersions.

For easier incorporation the polyisocyanate can be further pre-thinned with the solvent that is also used as film-forming agent for the polymer dispersion (e.g., dipropyleneglycol dimethylether, methoxypropyl acetate, butylglycol acetate or butyldiglycol acetate). Only PU grade solvents should be used (absence of water and reactive groups such as hydroxyl or amino groups).

Film-forming agents (solvents), additives and thickeners should be free from compounds containing active hydrogen groups.

Tertiary amines (dimethylethanol amine, triethyl amine, triethanol amine) can be used to adjust the pH.

The pH strongly influences the pot life of the formulation: the higher the pH, the shorter the pot life. At a pH of 7,5 and above, the reaction of the polyisocyanate preferably with water and amine should be expected.

For further detailed application information please contact our Technical Support Department.

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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