

Water Dispersible Polyisocyanate

Technical Data Sheet

Name: Aquolin[®] 161
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Product Description

Aquolin[®] 161 is a water dispersible polyisocyanate based on hexamethylene diisocyanate (HDI). In combination with water-borne polyurethane, polyacrylate, etc., it can be used for adhesive products to improve the resistance to hydrolysis and heat. It also can be used for waterborne coatings. After addition of Aquolin[®] 161, the ready-to-use mixture must be used within the pot life.

Aquolin[®]161 can be diluted with the solvents, such as propylene glycol methyl ether acetate (PMA), propylene glycol diacetate (PGDA), butyl acetate, etc. Only PU grade solvents (< 0.05% water) should be used and the solvents must be tested in advance by the user to determine suitability.

Properties

1. Excellent resistance.
2. Long pot life.
3. Good gloss and building up.

Characteristic data^{*}

Property	Value	Unit	Method
Appearance	Transparent to light yellow liquid		
NCO content	18.5±0.5	%	GB/T 12009.4-2016
Viscosity	2000-4000	mPa·s	Brookfield LV, 63#/3rpm, 25°C
Color APHA	<60		GB/T 1722-1992
Monomeric isocyanate	≤0.1	%	GB/T 18446-2009
Flash point	~226	°C	GB/T 5208
Density	~1.16	g/cm ³	GB/T 4472-2011

*These properties are typical but do not constitute specifications.

Storage

Aquolin[®] 161



The product should be stored in dry conditions above 5°C and below 35°C with the integrity of the packaging, and prevent direct sunlight. The validity of this product is for 12 months, performance assessment is recommended before use after shelf life. The product should be protected from freezing during storage. Water dispersible polyisocyanates are very moisture-sensitive and react with water to form carbon dioxide and insoluble ureas. The generation of carbon dioxide can lead to dangerous increases in pressure. The containers must always be kept tightly closed and the access of water in all forms must be prevented. It is suggested to use up once the package is open.

Disclaimer: Wanhua Chemical Group Co., LTD. recommends that any customers of this material should check with Materials Safety Data Sheet (MSDS) for details about safely handling this material. We also suggest that you contact the suppliers of any other materials used in our recommended formulations and suggestions for appropriate health and safety regulations prior to use. The information contained herein is believed to be reliable. However, nothing in this technical sheet should be considered as a representation of warranty, express or implicit, regarding the product characteristics, application, quality, safety, merchantability or fitness for a particular purpose. Nothing contained herein is to be considered as permission, recommendation, nor as an inducement to practice any patented invention without permission of the patent owner.