

Water Dispersible Polyisocyanate

Technical Data Sheet

Name: Aquolin[®] 166
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NO. WHSM_166
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Product Description

Aquolin[®] 166 is a hydrophilically modified polyisocyanate with high functionality, low viscosity, good dispersibility and long pot life. It can be used with various hydroxyl-functionalized dispersions for 2k solutions. An appropriate amount of Aquolin[®] 166 in waterborne polyurethane adhesive can enhance the bonding strength, heat resistance and hydrolysis resistance significantly, thus it is applicable for various waterborne adhesive applications such as footwear, automotive interior and 3D lamination.

Product Features

1. High functionality with low viscosity
2. Good dispersibility
3. Long pot life

Characteristic Data*

Property	Value	Unit	Method
Appearance	Transparent to light yellow liquid		Visual
Weight Solids	≥99.8	%	WHPU/T011-571-2017 (5cm,105°C,60min)
NCO content	22.0-23.0	%	GB 12009.4-2016
Viscosity (25°C)	700-1700	mPa·s	GB/T 2794-2013 (Brookfield LV,63#/30rpm)
Color APHA	<60		GB/T 1722-1992
HDI monomer content	≤0.25	%	GB/T 18446-2009
Flash point	~226	°C	GB/T 5208-2008
Density	~1.16	g/cm ³	GB/T 4472-2011

*Property values represent typical results only and are not to be considered as specifications, subject to specific COA

Handling and Precautions

Aquolin[®] 166



Aquolin[®] 166 has good compatibility with many solvents such as esters, ether esters, xylene and solvent naphtha 100. Urethane grade solvent is recommended (moisture content of less than 0.05%) and conduct specific experiments before using.

Storage

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 at least 6 months, performance assessment is recommended before use after more than 6 months. The product should be protected from freezing during storage. After opening the packing, suggested to use up one time.

Disclaimer: Wanhua Chemical Group Co., LTD. recommends that customers should check with Materials Safety Data Sheet (MSDS) for details about safety instructions. We also suggest that you contact the suppliers of other materials used in our recommended formulations and consult 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.

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