

Aqueous Polyurethane Dispersion

Technical Data Sheet

Name: Adwel® 1630C
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Product Description

Adwel® 1630C is an aqueous anionic aliphatic polyurethane dispersion. It is a raw material for the formulation of heat activated adhesives in footwear industries. Adwel® 1630C has excellent bonding properties on a variety of materials. Its bonding strength, heat and water resistance can be enhanced by adding an appropriate amount of water dispersible polyisocyanate hardener named Aquolin® 161 from Wanhua Chemical. Solvent: <1% acetone. It's APEO, organotin and organic amine neutralizing agent free. Biocide: CMIT/MIT 3:1 14ppm and MBIT 200ppm.

Properties

1. Outstanding initial tacky property
2. Excellent bonding strength
3. Excellent heat resistance
4. Excellent water resistance

Characteristic data*

Property	Value	Unit	Method
Appearance	Milky white liquid		
Weight Solids	50±1	%	WHPU/T011-817-2017 (5cm,150°C,20min)
pH	6.0-9.0		GB/T 14518-1993
Viscosity	40-600	mPa·s	GB/T 2794-2013 (Brookfield,LV,62#,30rpm)
Density	1.04-1.09	g/cm ³	GB/T6750-2007
Activated temperature	45-55	°C	
MFFT	Approx. 5	°C	GB/T9267-2008

*These properties are typical but do not constitute specifications.

Adwel® 1630C



Handling and Precautions

1. If Adwel® 1630C needs to be diluted, deionized water must be used; if not, flocculation or demulsification may occur.
2. If Adwel® 1630C needs to be mixed with other products, compatibility and storage stability must be tested.
3. With addition of Aquolin® 161 as crosslinker, the system has a pot life of approximately 4 hours and should not be poured back to the adhesive if not used completely; otherwise, it will be cured after long time storage.

Storage

The validity of this product is for 6 months, and performance should be assessed if the product has been out of shelf life. The product should be stored above 5°C and below 35°C. Temperatures below 5°C will result in viscosity rising or irreversibly damaged. Prolonged storage at higher temperatures may affect the product properties and possibly result in sedimentation or coagulation. The product should be protected from direct sunlight with the integrity of the packaging, to prevent evaporation of water and the formation of films on the surface. Films or lumps can form during storage and transport of the product due to its film forming nature. A filtration process is necessary before further application.

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.