

Technical Data Sheet

Revision Date: 2017-06-30
Name: WANNATE[®]MDI-100

NO: WHPU_0001
Version: 6.0

Application

WANNATE[®] MDI-100 is pure MDI. It is a white to light yellow- green crystal at room temperatures. When melted, it becomes a clear liquid , no mechanical impurities. WANNATE[®] MDI-100 can be widely used in the production of various polyurethane elastomers including cellular elastomers, thermoplastic elastomers, cast elastomers, synthetic leather, adhesives, coatings and sealants.

Typical Physical and Chemical Properties

Test Item(s)	Specification(s)
Appearance	Solid: White to light yellow- green crystal Liquid: Clear liquid, No mechanical impurities
MDI Purity /(A/A)	≥99.6
2,4'-isomer/(A/A)	≤2.0
4,4'-isomer/(A/A)	≥97.0
Chromatic Number(Hazen)	≤30
Cyclohexane insoluble/%	≤0.200
Crystallization point /°C	≥38.1
Hydrolysable chlorine, %	≤0.003

Package(s)

210 L (55 gal.) steel drums, 235kg (517 lbs.)/drum

18L (5 gal.) pails, 20kg (44lbs.) / pail

20 ton (44,000 lb) insulated tank lorry.

Storage

Container: Freshly manufactured WANNATE[®] MDI-100 is a clear liquid when molten. As WANNATE[®] MDI-100 is a reactive chemical, reaction with atmospheric moisture occurs easily

and leads to the formation of insoluble ureas and carbon dioxide gas which can lead to pressure build-up in closed containers and increases in the viscosity of the product. Containers must therefore be absolutely dry and carefully sealed after purging with dry nitrogen.

Temperature: Extended storage will result in insoluble dimers. The rate of dimer formation varies with temperature. The lower the WANNATE[®] MDI-100 storage temperature the better is. It is best to store solid WANNATE[®] MDI-100 below 0°C. It is recommended melted liquid WANNATE[®] MDI-100 be stored at 44°C-46°C and to use it up as soon as possible.

Recommended Melting Conditions

To minimize dimer formation, it is recommended the solid WANNATE[®] MDI-100 be quickly and evenly melted in a forced air oven equipped with rollers. Oven temperature should be about 80~100°C, while MDI should not be allowed to exceed 70°C. The melted MDI should be used up as soon as possible. Make sure the heating is even and there is no leakage during heating. To avoid localized heating, electrical heating is not recommended. Note that the product will decompose and give off gas above 230°C. Water or steam is not recommended since water will react with MDI if there is any leakage. Only when the container is intact could water be used to melt the product. The container should be wiped dry when done.

Shelf Life

Under recommended storage conditions, the shelf life of WANNATE[®] MDI-100 is 3 months since the date of production. Product stored past the expiration date may still be suitable for use as long as key physical and chemical properties are still within specification. Liquid WANNATE[®] MDI-100 delivered by insulated tank lorry has a shelf life of 10 days.

For more information about safety and environment, please refer to our SDS or contact our customer service center.

Version information:

Date of first issue : June 6 ,2013

Date of 1st revise: Feb 6, 2015 Reason for revision : The need of product classification

Date of 2nd revise : May 5, 2015 Reason for revision: A change of company address

Date of 3rd revise : Aug.18, 2015 Reason for revision: Unified the template of TDS

Date of 4th revise: May 31, 2016 Reason for revision: Change of product standard.

Date of 5th revise: June ,30 2017 Reason for revision: Change of company LOGO.

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The information provided here is for reference only. The specification will be provided in the quality certificate or in the contract. It is the user's responsibility to test the material and its suitability for a process. We have no control over what another party does with the material and we cannot take any responsibility for another party's action. Nor will we be responsible for any indirect damages while using our products. The user is welcome to contact our customer and technical service center with questions on our products.