

Technical Data Sheet

Revision Date: 2017-06-30
Name: WANNATE[®]MDI-50F

NO. WHPU_0008
Version: 6.0

Application

WANNATE[®] MDI-50F is a mixture of 2,4' and 4,4' diphenylmethane diisocyanates, or called 2,4' rich isocyanate. It is a clear, colorless to pink liquid at ambient temperatures.

Due to the different reactivity between 2,4' and 4,4' MDI, WANNATE[®]MDI-50F provides better flowability for the production of injection molding. WANNATE[®] MDI-50F can be widely used in the production of various PU elastomers, adhesives, paint and automotive parts. It also can be used as a substitute for TDI in the production of flexible PU foam, which will reduce productive cost and environmental pollution and improve handling conditions.

Typical Physical and Chemical Properties

Test Item(s)	Specification(s)
Appearance	Colorless to pink liquid
MDI Purity /%	≥99.6
2,4'-isomer/%	50.0 ~ 54.0
4,4'-isomer/%	44.5 ~ 49.0
Chromatic Number(APHA)	≤50
Cyclohexane insoluble/%	≤0.200
Crystallization point /°C	≤15.0
Hydrolysable chlorine, %	≤0.0050

Package(s)

210L iron drums, 235kg/drum

Storage

Container: Freshly manufactured WANNATE[®] MDI-50F is a clear liquid at room temperature. It tends to turn yellow upon exposure to air and light. As WANNATE[®] MDI-50F is a reactive chemical, reaction with atmospheric moisture occurs easily and leads to the formation of insoluble urea and CO₂ 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 congested with dry nitrogen.

Temperature: Extended storage will result in insoluble dimer. It is best to store at 15°C-40°C.

Recommended Melting Conditions

Crystallization will occur if WANNATE[®] MDI-50F is stored below 17°C. To minimize the formation dimer, it is recommended to melt solid WANNATE[®]MDI-50F quickly and evenly, such as using a forced air oven equipped with rollers in 80-100°C. On no account should the temperature during melting (product temperature) exceed 70°C. 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 heating or steam heating is not recommended either 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-50F is 6 months since the date of production.

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.

For further information please contact us:

Address: Wanhua Chemical Group Co., Ltd.

No.17, Tianshan Rd, YEDA, Yantai, 264006, China

Customer service: Tel: +86 (535) 3388000 Fax: +86 (535) 683 7242

Web-site: <http://www.whchem.com>

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.