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## Technical Data Sheet

# 4-Methylmorpholine

#### **Product Information**

Chemical Name	4-Methylmorpholine
CAS #	109-02-4
EINECS	203-640-0
Formula	C5H11NO
Molecular Weight	101.15
Synonyms	4-Methyl-1-oxa-4-azacyclohexane;N-Methylmorpholine; NMM
Chemical structure	



#### Description

Colorless liquid. With characteristic odor. Soluble in organic solvent, can miscibility with water and ethanol.

#### **Physical Properties**

Melting point	<b>-66.1</b> ℃
Boiling point	<b>115-116</b> ℃
Flash point	<b>13</b> ℃
Density	0.92
Refractive index	1.4339-1.4359

#### Specification

Item	standard
Assay, % min	99.5
Color, APHA m	ax. 15

	Water, % max.	0.05				
Applications	,					
	It can be used in/with:					
	Catalyst					
	<ul> <li>Extraction agent</li> </ul>					
	Chlorine hydrocarbon stability agent					
	Corrosion inhibitor					
	<ul> <li>Analysis reagent</li> </ul>					
	Drug manufacture					
Packaging						
	180kg plastic drum					
	Total 14.4MT per 20ft container with pallets or without pallets					
Safety						
-	CLASS 3: Flammable liquid. Cl	ass 8: Corrosive material				
	Always refer to the Material Sat	fety Data Sheet (MSDS)				
Storage & Ha	ndling					
	inaning					
	Store in a sogregated and oppr	aved area. Keen container in a cool, well ventilated area. Keen container				

Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).Please refer to the Materials Safety Data Sheet (MSDS) for the handling methods.

Always refer to the Material Safety Data Sheet (MSDS) for detailed information on handling and disposal.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchant ability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if we has been advised of the possibility of such damages.

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