



Product Name: Methyl Dietanol amine

Chemical Formula: $C_5H_{13}NO_2$

CAS No: 105-59 - 9

Description

Methyldiethanolamine (MDEA) is a clear, colorless to pale yellow, water-soluble tertiary alkanolamine. It is widely used as an effective solvent for the selective removal of acidic gases, particularly hydrogen sulfide (H_2S) and carbon dioxide (CO_2), from natural gas, refinery gases, syngas, and other industrial gas streams. MDEA offers good thermal and chemical stability and low volatility, making it suitable for continuous gas-treatment processes.

Features

High purity and excellent chemical stability
Selective absorption of H_2S over CO_2
Low vapor pressure and low volatility
Good thermal stability
Water soluble
Suitable for gas sweetening and acid-gas removal processes

Applications

Natural gas sweetening
 H_2S and CO_2 removal
Refinery and petrochemical gas treatment
Syngas purification
Ammonia and hydrogen production gas treatment
Acid gas absorption systems

Handling and Packaging

Store in tightly closed containers in a cool, dry and well-ventilated area. Protect from excessive heat, moisture and contamination. Suitable packaging includes HDPE drums, IBC containers, and compatible carbon-steel or stainless-steel storage tanks. Handle using appropriate personal protective equipment and avoid prolonged contact with skin and eyes.

 CASPIAN CHEMISTRY Phone: 01344430400 E-mail: info@caspianchemistry.com Address: Anzali Free Zone, Ayatollah Pishvaei Street Website: www.caspianchemistry.com  Scan for SDS (Safety Data Sheet) and Technical Data	MDEA METHYLDIETHANOLAMINE INDUSTRIAL GRADE <table border="1"> <tr><td>Chemical Formula</td><td>: $C_5H_{13}NO_2$</td></tr> <tr><td>CAS No.</td><td>: 105-59-9</td></tr> <tr><td>Molecular Weight</td><td>: 119.16 g/mol</td></tr> <tr><td>Purity</td><td>: $\geq 99.0\%$</td></tr> <tr><td>Appearance</td><td>: Clear, Colorless to Pale Yellow Liquid</td></tr> <tr><td>Net Weight</td><td>: 220 kg</td></tr> <tr><td>Batch No.</td><td>:</td></tr> <tr><td>Production Date</td><td>:</td></tr> <tr><td>Expiry Date</td><td>:</td></tr> </table> MADE IN IRAN	Chemical Formula	: $C_5H_{13}NO_2$	CAS No.	: 105-59-9	Molecular Weight	: 119.16 g/mol	Purity	: $\geq 99.0\%$	Appearance	: Clear, Colorless to Pale Yellow Liquid	Net Weight	: 220 kg	Batch No.	:	Production Date	:	Expiry Date	:	HAZARD INFORMATION  WARNING Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation. PRECAUTIONARY STATEMENTS - Avoid breathing vapors. - Wear protective gloves and eye protection. - Wash thoroughly after handling. - Use only in a well-ventilated area. - Keep container tightly closed. STORAGE - Store in a cool, dry, well-ventilated place. - Keep away from direct sunlight. - Keep away from strong oxidizing agents. FIRST AID - Eyes: Rinse cautiously with water for several minutes. - Skin: Wash with plenty of water. - Inhalation: Move to fresh air.
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Methyldiethanolamine Datasheet

Parameter	Specification	Test Method
Molecular weight	119/16g/m	Calculation
Appearance	Clear ,colorless to pale Yellow liquid	Visual inspection
MEDA purity	≥99.0wt%	GC-FID
Water content	≤05 wt%	KARI Fischer- ASTM E 1064
Density 20 ⁰ c	1.04-1.05g/cm ³	Digital Density Meter ASTM D 4059
Melting Point	-21 ⁰ c	DSC/Capillary Method
Boiling Point	247 ⁰ c	ASTM D 86/Reference method
Color (APHA)	≤30	APHA COLOR METHOD
Viscosity 25 ⁰ c	100-150 mpa.s	
PH	Strong Alkaline	PH Meter
MEA	≤0.2wt%	GC-FID
DEA	≤0.5wt%	GC-FID
ASH/PESIDUE	<0.05WT	Gravimetric
Iron (Fe)	≤5ppm	ICP-OES/IEP-S
Chloride	≤10ppm	ION CHROMATOGRAPHY