

## 2-(METHYL AMINO) ETHANOL CAS NO 109-83-1

## MATERIAL SAFETY DATA SHEET SDS/MSDS

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name : 2-(Methyl Amino) Ethanol

CAS-No. : 109-83-1

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Industrial & for professional use only.

#### 1.3 Details of the supplier of the safety data sheet

Company : Central Drug House (P) Ltd  
7/28 Vardaan House  
New Delhi -110002  
INDIA

Telephone : +91 11 49404040

Email : [care@cdhfinechemical.com](mailto:care@cdhfinechemical.com)

#### 1.4 Emergency telephone number

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Dermal (Category 4), H312

Skin corrosion (Category 1B), H314

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

Specific target organ toxicity - repeated exposure, Oral (Category 2), Kidney, Testes, Liver, spleen, ovary, Epididymus, H373

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 2.2 Label elements

##### Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

Danger

Hazard statement(s)

H302 + H312

Harmful if swallowed or in contact with skin

H314

Causes severe skin burns and eye damage.

H335

May cause respiratory irritation.

H373	May cause damage to organs (Kidney, Testes, Liver, spleen, ovary, Epididymus) through prolonged or repeated exposure if swallowed.
Precautionary statement(s) P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P312 + P330	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statements	none

## 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms	:	N-Methylethanolamine
Formula	:	C <sub>3</sub> H <sub>9</sub> NO
Molecular weight	:	75.11 g/mol
CAS-No.	:	109-83-1
EC-No.	:	203-710-0
Index-No.	:	603-080-00-0

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component		Classification	Concentration
<b>N-Methylethanolamine</b>			
CAS-No.	109-83-1	Acute Tox. 4; Skin Corr. 1B;	<= 100 %
EC-No.	203-710-0	STOT SE 3; STOT RE 2;	
Index-No.	603-080-00-0	H302, H312, H314, H335,	
		H373	
		Concentration limits:	
		>= 5 %: STOT SE 3, H335;	

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### **4.2 Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

#### **4.3 Indication of any immediate medical attention and special treatment needed**

No data available

### **SECTION 5: Firefighting measures**

#### **5.1 Extinguishing media**

##### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### **5.2 Special hazards arising from the substance or mixture**

Carbon oxides, Nitrogen oxides (NO<sub>x</sub>)

#### **5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

#### **5.4 Further information**

Use water spray to cool unopened containers.

### **SECTION 6: Accidental release measures**

#### **6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8.

#### **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

#### **6.3 Methods and materials for containment and cleaning up**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

#### **6.4 Reference to other sections**

For disposal see section 13.

### **SECTION 7: Handling and storage**

#### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

#### **7.2 Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Storage class (TRGS 510): Combustible, corrosive hazardous materials

#### **7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

### **SECTION 8: Exposure controls/personal protection**

#### **8.1 Control parameters**

#### **8.2 Exposure controls**

##### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## Personal protective equipment

### Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

### Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Appearance	Form: clear, liquid Colour: colourless
b) Odour	amine-like
c) Odour Threshold	No data available
d) pH	13.6 at 100 g/l at 20 °C
e) Melting point/freezing point	Melting point/range: -4.99 °C - Decomposes on heating.
f) Initial boiling point and boiling range	159 °C - lit.
g) Flash point	76 °C - closed cup
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	Upper explosion limit: 19.8 %(V) Lower explosion limit: 1.6 %(V)
k) Vapour pressure	0.5 mmHg at 20 °C
l) Vapour density	2.59 - (Air = 1.0)
m) Relative density	0.935 g/cm <sup>3</sup> at 25 °C
n) Water solubility	ca.1,000 g/l at 20 °C - completely miscible
o) Partition coefficient: n-octanol/water	log Pow: -0.909 at 25 °C
p) Auto-ignition temperature	350 °C at 1,013.25 hPa
q) Decomposition temperature	No data available

- |    |                      |                                      |
|----|----------------------|--------------------------------------|
| r) | Viscosity            | 6.36 mm <sup>2</sup> /s at 37.5 °C - |
| s) | Explosive properties | No data available                    |
| t) | Oxidizing properties | No data available                    |

## 9.2 Other safety information

- |                         |                    |
|-------------------------|--------------------|
| Surface tension         | 34.4 mN/m at 22 °C |
| Dissociation constant   | 9.83 - 10.18       |
| Relative vapour density | 2.59 - (Air = 1.0) |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

Heat, flames and sparks.

### 10.5 Incompatible materials

Oxidizing agents, Copper, Zinc, Iron, Do not store near acids.

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NO<sub>x</sub>) Other decomposition products - No data available  
In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - Rat - female - 1,391 mg/kg(N-Methylethanolamine) (OECD Test Guideline 401)  
LD50 Dermal - Rabbit - female - 1,006 mg/kg(N-Methylethanolamine) (OECD Test Guideline 402)

#### Skin corrosion/irritation

Skin - Rabbit(N-Methylethanolamine) Result:  
Corrosive - 3 min  
(OECD Test Guideline 404)

#### Serious eye damage/eye irritation

Eyes - Rabbit(N-Methylethanolamine) Result:  
Corrosive  
(OECD Test Guideline 405)

#### Respiratory or skin sensitisation

No data available(N-Methylethanolamine)

#### Germ cell mutagenicity

Hamster(N-Methylethanolamine)  
fibroblast  
Result: negative

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity**

No data available(N-Methylethanolamine)

**Specific target organ toxicity - single exposure**

No data available(N-Methylethanolamine)

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available(N-Methylethanolamine)

**Additional Information**

Repeated dose toxicity - Rat - male and female - Oral - No observed adverse effect level - 50 mg/kg(N-Methylethanolamine)

RTECS: KL6650000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea(N-Methylethanolamine)

**SECTION 12: Ecological information****12.1 Toxicity**

Toxicity to fish	LC50 - Danio rerio (zebra fish) - > 100 mg/l - 96 h(N-Methylethanolamine)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 33 mg/l - 48 h(N-Methylethanolamine) (Directive 67/548/EEC, Annex V, C.2.)
Toxicity to algae	static test EC50 - Desmodesmus subspicatus (green algae) - 28.1 mg/l - 72 h(N-Methylethanolamine) (Directive 67/548/EEC, Annex V, C.3.)

**12.2 Persistence and degradability**

Biodegradability                      aerobic - Exposure time 21 d(N-Methylethanolamine)  
Result: 92 - 93 % - Readily biodegradable.  
(OECD Test Guideline 301A)

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available(N-Methylethanolamine)

**12.5 Results of PBT and vPvB assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6 Other adverse effects**

Harmful to aquatic life.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

## SECTION 14: Transport information

### 14.1 UN number

ADR/RID: 2735

IMDG: 2735

IATA: 2735

### 14.2 UN proper shipping name

ADR/RID: AMINES, LIQUID, CORROSIVE, N.O.S. (N-Methylethanolamine)

IMDG: AMINES, LIQUID, CORROSIVE, N.O.S. (N-Methylethanolamine)

IATA: Amines, liquid, corrosive, n.o.s. (N-Methylethanolamine)

### 14.3 Transport hazard class(es)

ADR/RID: 8

IMDG: 8

IATA: 8

### 14.4 Packaging group

ADR/RID: II

IMDG: II

IATA: II

### 14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

### 14.6 Special precautions for user

No data available

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

## SECTION 16: Other information

### Full text of H-Statements referred to under sections 2 and 3.

H302 Harmful if swallowed.

H302 + H312 Harmful if swallowed or in contact with skin

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure if swallowed.

### Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.cdhfinechemical.com](http://www.cdhfinechemical.com) for additional terms and conditions of sale.