# **ETHANOLAMINE (MONO) FOR SYNTHESIS MSDS**

**CAS No: 141-43-5 MSDS** 



# **MATERIAL SAFETY DATA SHEET (MSDS)**

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

#### **Product identifier**

Product form : Substance

EC index no : 603-030-00-8 EC no : 205-483-3 CAS No : 141-43-5 Product code : 00134

Synonyms : Monoethanolamine / 2-Aminoethyl alcohol / 2-Aminoethanol

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

#### 1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

#### Uses advised against

No additional information available

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

Labogens Fine Chem Industries 1st Floor, Above Bank of India, Guru Vihar, Rahon Road, Ludhiana Pb. (141007) +91 9316777775, +91 7707855700 sales@labogens.com - www.Labogens.com

#### 1.4. **Emergency telephone number**

Emergency number : +91 7707855700 (9:00am - 6:00 pm)

#### **SECTION 2: Hazards identification**

# Classification of the substance or mixture

## Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), H302

Category 4

H312

Acute toxicity (dermal),

Category 4

H332

Acute toxicity (inhal.), Category 4

Skin corrosion/irritation, H314

Category 1B

Full text of classification categories and H statements : see section 16

09/04/2015 1/10 www.Labogens.com

# Safety Data Sheet

#### Classification according to Directive 67/548/EEC or 1999/45/EC

Xn; R20/21/22 C; R34

Full text of R-phrases: see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)





GHS05

Signal word (CLP) : Danger

Hazard statements (CLP) : H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled

H314 - Causes severe skin burns and eye damage

Precautionary statements (CLP) : P280 - Wear protective gloves/protective clothing/eye protection/face protection

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing P310 - Immediately call a POISON CENTER or doctor/physician

#### 2.3. Other hazards

No additional information available

#### **SECTION 3: Composition/information on ingredients**

### 3.1. Substance

Name : ETHANOLAMINE (MONO) For Synthesis

CAS No : 141-43-5 EC no : 205-483-3 EC index no : 603-030-00-8

Full text of R- and H-phrases: see section 16

#### 3.2. Mixture

Not applicable

# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Immediately call a POISON CENTER or doctor/physician. Specific treatment is

urgent (see ... on this label).

www.Labogens.com 09/04/2015 2/10

# Safety Data Sheet

First-aid measures after skin contact : Immediately call a POISON CENTER or doctor/physician. Specific measures (see ...

on this label). Wash with plenty of soap and water. Wash contaminated clothing before reuse. Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. Immediately call a POISON CENTER or

doctor/physician. Specific treatment (see ... on this label).

First-aid measures after ingestion : Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell. Do

NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Specific treatment (see ... on this label).

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

Symptoms/injuries : Causes severe skin burns and eve damage.

Symptoms/injuries after inhalation : Corrosive to the respiratory tract.

Symptoms/injuries after skin contact : Repeated exposure to this material can result in absorption through skin causing

significant health hazard. Harmful in contact with skin.

Symptoms/injuries after eye contact : Causes serious eye damage.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

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

No additional information available

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

#### 5.1. Extinguishing media

Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

Unsuitable extinguishing media : Do not use a heavy water stream.

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

No additional information available

#### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

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

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

#### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

Emergency procedures : Stop release.

### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

#### 6.4. Reference to other sections

No additional information available

# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

Precautions for safe handling : Do not breathe dust/fume/gas/mist/vapours/spray.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash ... thoroughly after

handling. Wash contaminated clothing before reuse.

www.Labogens.com 09/04/2015 3/10

# Safety Data Sheet

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

Technical measures : Comply with applicable regulations.

Storage conditions : Store in original container. Keep container tightly closed. Store in a dry place.

Protect from moisture.

Packaging materials : Do not store in corrodable metal.

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

No additional information available

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

#### 8.1. Control parameters

No additional information available

#### 8.2. Exposure controls

Hand protection : protective gloves

Eye protection : Chemical goggles or face shield
Skin and body protection : Wear suitable protective clothing
Respiratory protection : Wear respiratory protection

#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Molecular mass : 61.08 g/mol Colour : Clear Colorless.

Odour : ammonia odor.

Odour threshold : No data available

pH : 12.1

Relative evaporation rate (butylacetate=1) : < 1

Melting point : 10 - 11

Freezing point : No data available

Boiling point : 170 °C

Flash point : 86 °C

Auto-ignition temperature : 780 °C

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapour pressure : 0.3 hPa at 20 °C

Relative vapour density at 20 °C : 2.1

www.Labogens.com 09/04/2015 4/10

# Safety Data Sheet

Relative density : No data available

Density : 1.012 g/cm<sup>3</sup>

Solubility : Water: Miscible in water

Log Pow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosive properties : No data available

Oxidising properties : No data available

Explosive limits : 0.025 - 0.17 vol %

#### 9.2. Other information

No additional information available

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Thermal decomposition generates: Corrosive vapours.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No additional information available

#### 10.4. Conditions to avoid

Direct sunlight. Air contact. Moisture.

# 10.5. Incompatible materials

No additional information available

## 10.6. Hazardous decomposition products

Thermal decomposition generates: Corrosive vapours.

## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Dermal: Harmful in contact with skin. Inhalation: Harmful

if inhaled.

Skin corrosion/irritation : Causes severe skin burns and eye damage.

pH: 12.1

Serious eye damage/irritation : Serious eye damage, category 1, implicit

pH: 12.1

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

Reproductive toxicity : Not classified Specific target organ toxicity (single : Not classified

exposure)

www.Labogens.com 09/04/2015 5/10

# Safety Data Sheet

Additional information : Corrosive to the respiratory tract

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard : Not classified

Potential adverse human health effects

and symptoms

: Harmful if swallowed. Harmful in contact with skin.

#### **SECTION 12: Ecological information**

#### 12.1. Toxicity

No additional information available

#### 12.2. Persistence and degradability

No additional information available

# 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

# 12.5. Results of PBT and vPvB assessment

No additional information available

## 12.6. Other adverse effects

No additional information available

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Product/Packaging disposal

: Dispose of contents/container to ...

recommendations

### **SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

# 14.1. UN number

UN-No. (ADR) : 2491 UN-No. (IMDG) : 2491 UN-No.(ADN) : 2491 UN-No. (RID) : 2491

www.Labogens.com 09/04/2015 6/10

# Safety Data Sheet

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : ETHANOLAMINE
Proper Shipping Name (IMDG) : ETHANOLAMINE
Proper Shipping Name (IATA) : ETHANOLAMINE
Proper Shipping Name (ADN) : ETHANOLAMINE
Proper Shipping Name (RID) : ETHANOLAMINE

Transport document description (ADR) : UN 2491 ETHANOLAMINE, 8, III, (E)
Transport document description (IMDG) : UN 2491 ETHANOLAMINE, 8, III
Transport document description (IATA) : UN 2491 ETHANOLAMINE, 8, III
Transport document description (ADN) : UN 2491 ETHANOLAMINE, 8, III
Transport document description (RID) : UN 2491 ETHANOLAMINE, 8, III

### 14.3. Transport hazard class(es)

#### **ADR**

Transport hazard class(es) (ADR) : 8
Danger labels (ADR) : 8



#### **IMDG**

Transport hazard class(es) (IMDG) : 8
Danger labels (IMDG) : 8



#### IATA

Transport hazard class(es) (IATA) : 8
Hazard labels (IATA) : 8



#### ADN

Transport hazard class(es) (ADN) : 8
Danger labels (ADN) : 8



### **RID**

Transport hazard class(es) (RID) : 8

www.Labogens.com 09/04/2015 7/10

# Safety Data Sheet

Danger labels (RID) : 8



#### 14.4. Packing group

Packing group (ADR) : III
Packing group (IMDG) : III
Packing group (IATA) : III
Packing group (ADN) : III
Packing group (RID) : III

#### 14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

# 14.6. Special precautions for user

## - Overland transport

Classification code (ADR) : C7
Limited quantities (ADR) : 5L
Excepted quantities (ADR) : E1

Packing instructions (ADR) : P001, IBC03, LP01, R001

Mixed packing provisions (ADR) : MP19
Portable tank and bulk container : T4

instructions (ADR)

Portable tank and bulk container special

provisions (ADR)

Tank code (ADR) : L4BN
Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages : V12

(ADR)

Hazard identification number (Kemler No.) : 80

Orange plates :

80 2491

: TP1

Tunnel restriction code (ADR) : E EAC code : 2X

# - Transport by sea

Special provision (IMDG) : 223
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : P001, LP01
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP1
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-B
Stowage category (IMDG) : A

www.Labogens.com 09/04/2015 8/10

# Safety Data Sheet

Segregation (IMDG) : SG35 MFAG-No : 153

#### - Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y841
PCA limited quantity max net quantity : 1L

(IATA)

PCA packing instructions (IATA) : 852
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 856
CAO max net quantity (IATA) : 60L
Special provision (IATA) : A3
ERG code (IATA) : 8L

#### - Inland waterway transport

Classification code (ADN) : C7
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 0

#### - Rail transport

Classification code (RID) : C7
Limited quantities (RID) : 5L
Excepted quantities (RID) : E1

Packing instructions (RID) : P001, IBC03, LP01, R001

Mixed packing provisions (RID) : MP19
Portable tank and bulk container : T4

instructions (RID)

Portable tank and bulk container special

provisions (RID)

Tank codes for RID tanks (RID) : L4BN

Transport category (RID) : 3
Special provisions for carriage – Packages : W12

(RID)

Colis express (express parcels) (RID) : CE8
Hazard identification number (RID) : 80

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

: TP1

Not applicable

# **SECTION 15: Regulatory information**

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

# 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

ETHANOLAMINE (MONO) For Synthesis is not on the REACH Candidate List ETHANOLAMINE (MONO) For Synthesis is not on the REACH Annex XIV List

www.Labogens.com 09/04/2015 9/10

# Safety Data Sheet

### 15.1.2. National regulations

### Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 1, slightly hazardous to water (Classification according to

VwVwS, Annex 2; WGK No 94)

12th Ordinance Implementing the Federal

Immission Control Act - 12.BlmSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

#### Denmark

Class for fire hazard : Class III-1 Store unit : 50 liter

Classification remarks : Flammable according to the Danish Ministry of Justice; Emergency management

guidelines for the storage of flammable liquids must be followed

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct

contact with the product

#### 15.2. Chemical safety assessment

No additional information available

#### **SECTION 16: Other information**

# Full text of R-, H- and EUH-phrases:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H332	Harmful if inhaled
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R34	Causes burns
С	Corrosive
Xn	Harmful

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

www.Labogens.com 09/04/2015 10/10