

### MATERIAL SAFETY DATA SHEET (MSDS)

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

##### 1.1. Product identifier

Product form : Substance  
:  
CAS No : 74-89-5  
Product code : 4606H

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

###### 1.2.1. Relevant identified uses

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

###### 1.2.2. Uses advised against

No additional information available

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

LOBA CHEMIE PVT.LTD.  
107 Wode House Road, Jehangir Villa, Colaba  
400005 Mumbai - INDIA  
T +91 22 6663 6663 - F +91 22 6663 6699  
[info@lobachemie.com](mailto:info@lobachemie.com) - [www.lobachemie.com](http://www.lobachemie.com)

##### 1.4. Emergency telephone number

Emergency number : + 91 22 6663 6663 (9:00am - 6:00 pm)

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

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

Flammable liquids, H224  
Category 1  
Acute toxicity (oral), H302  
Category 4  
Acute toxicity H331  
(inhalation:gas) Category  
3  
Skin corrosion/irritation, H314  
Category 1  
Specific target organ H335  
toxicity — Single  
exposure, Category 3,  
Respiratory tract irritation

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

# METHYLAMINE FOR SYNTHESIS

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

F+; R12  
Xn; R20  
Xi; R41  
Xi; R37/38

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) :



GHS02

GHS05

GHS06

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H224 - Extremely flammable liquid and vapour  
H302 - Harmful if swallowed  
H314 - Causes severe skin burns and eye damage  
H331 - Toxic if inhaled  
H335 - May cause respiratory irritation

Precautionary statements (CLP) :

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
P260 - Do not breathe dust/fume/gas/mist/vapours/spray  
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 : METHYLAMINE FOR SYNTHESIS  
CAS No : 74-89-5

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

### 3.2. Mixture

Not applicable

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### 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. Call a POISON CENTER or doctor/physician if you feel unwell.
- First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see ... on this label).
- 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.
- First-aid measures after ingestion : Rinse mouth out with water. If you feel unwell, seek medical advice.

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

- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after skin contact : Causes skin irritation.
- Symptoms/injuries after eye contact : Causes serious eye damage.

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>).
- Unsuitable extinguishing media : Do not use a heavy water stream.

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

- Fire hazard : Extremely flammable liquid and vapour.
- Explosion hazard : May form flammable/explosive vapour-air mixture.

#### 5.3. Advice for firefighters

No additional information available

### SECTION 6: Accidental release measures

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

- General measures : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

##### 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

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Additional hazards when processed	: Handle empty containers with care because residual vapours are flammable.
Precautions for safe handling	: No naked lights. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area.
Hygiene measures	: Wash ... thoroughly after handling.

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

Technical measures	: Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/... equipment.
Storage conditions	: Keep in fireproof place. Keep container tightly closed.
Incompatible materials	: Heat sources.

#### 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 safety glasses
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	: 31.06 g/mol
Colour	: Clear Colorless.
Odour	: fishy ammonical.
Odour threshold	: No data available
pH	: 14 at 100 g/l
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: -40 °C
Freezing point	: No data available
Boiling point	: 48 °C
Flash point	: -10 °C
Auto-ignition temperature	: 430 °C

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Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable Extremely flammable liquid and vapour
Vapour pressure	: 371 hPa at 20 °C
Relative vapour density at 20 °C	: 1.07
Relative density	: No data available
Density	: 0.9 g/cm <sup>3</sup>
Solubility	: Water: Soluble in water
Log Pow	: -0.713
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 0.052 - 0.264 vol %

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Extremely flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Sparks. Heat. Direct sunlight. Overheating. Open flame.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

May release flammable gases.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Inhalation:gas: Toxic if inhaled.

Skin corrosion/irritation : Causes severe skin burns and eye damage.  
pH: 14 at 100 g/l

Serious eye damage/irritation : Serious eye damage, category 1, implicit  
pH: 14 at 100 g/l

Respiratory or skin sensitisation : Not classified

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Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

### SECTION 12: Ecological information

#### 12.1. Toxicity

No additional information available

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

METHYLAMINE FOR SYNTHESIS (74-89-5)	
Log Pow	-0.713

#### 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 recommendations	: Dispose of contents/container to ...
Additional information	: Handle empty containers with care because residual vapours are flammable.

### SECTION 14: Transport information

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

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### 14.1. UN number

UN-No. (ADR)	: 1235
UN-No. (IMDG)	: 1235
UN-No.(IATA)	: 1235
UN-No.(ADN)	: 1235
UN-No. (RID)	: 1235

### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: METHYLAMINE, AQUEOUS SOLUTION
Proper Shipping Name (IMDG)	: METHYLAMINE, AQUEOUS SOLUTION
Proper Shipping Name (IATA)	: METHYLAMINE, AQUEOUS SOLUTION
Proper Shipping Name (ADN)	: METHYLAMINE, AQUEOUS SOLUTION
Proper Shipping Name (RID)	: METHYLAMINE, AQUEOUS SOLUTION
Transport document description (ADR)	: UN 1235 METHYLAMINE, AQUEOUS SOLUTION, 3 (8), II, (D/E)
Transport document description (IMDG)	: UN 1235 METHYLAMINE, AQUEOUS SOLUTION, 3 (8), II
Transport document description (IATA)	: UN 1235 METHYLAMINE, AQUEOUS SOLUTION, 3 (8), II
Transport document description (ADN)	: UN 1235 METHYLAMINE, AQUEOUS SOLUTION, 3 (8), II
Transport document description (RID)	: UN 1235 METHYLAMINE, AQUEOUS SOLUTION, 3 (8), II

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR)	: 3 (8)
Danger labels (ADR)	: 3, 8



#### IMDG

Transport hazard class(es) (IMDG)	: 3 (8)
Danger labels (IMDG)	: 3, 8



#### IATA

Transport hazard class(es) (IATA)	: 3 (8)
Hazard labels (IATA)	: 3, 8



#### ADN

Transport hazard class(es) (ADN)	: 3 (8)
Danger labels (ADN)	: 3, 8

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### RID

Transport hazard class(es) (RID) : 3 (8)

Danger labels (RID) : 3, 8



### 14.4. Packing group

Packing group (ADR) : II

Packing group (IMDG) : II

Packing group (IATA) : II

Packing group (ADN) : II

Packing group (RID) : II

### 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) : FC

Limited quantities (ADR) : 1L

Excepted quantities (ADR) : E2

Packing instructions (ADR) : P001, IBC02

Mixed packing provisions (ADR) : MP19

Portable tank and bulk container instructions (ADR) : T7

Portable tank and bulk container special provisions (ADR) : TP1

Tank code (ADR) : L4BH

Vehicle for tank carriage : FL

Transport category (ADR) : 2

Special provisions for carriage - Operation (ADR) : S2, S20

Hazard identification number (Kemler No.) : 338

Orange plates :



Tunnel restriction code (ADR) : D/E

EAC code : •2WE

APP code : A(fl)

#### - Transport by sea

Limited quantities (IMDG) : 1 L

Excepted quantities (IMDG) : E2



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Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP1
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-C
Stowage category (IMDG)	: E
Segregation (IMDG)	: SG35, SG54
MFAG-No	: 132

### - Air transport

PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y340
PCA limited quantity max net quantity (IATA)	: 0.5L
PCA packing instructions (IATA)	: 352
PCA max net quantity (IATA)	: 1L
CAO packing instructions (IATA)	: 363
CAO max net quantity (IATA)	: 5L
ERG code (IATA)	: 3CH

### - Inland waterway transport

Classification code (ADN)	: FC
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E2
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EP, EX, A
Ventilation (ADN)	: VE01
Number of blue cones/lights (ADN)	: 1

### - Rail transport

Classification code (RID)	: FC
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E2
Packing instructions (RID)	: P001, IBC02
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T7
Portable tank and bulk container special provisions (RID)	: TP1
Tank codes for RID tanks (RID)	: L4BH
Transport category (RID)	: 2
Colis express (express parcels) (RID)	: CE7
Hazard identification number (RID)	: 338

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

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

METHYLAMINE FOR SYNTHESIS is not on the REACH Candidate List

METHYLAMINE FOR SYNTHESIS is not on the REACH Annex XIV List

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### 15.1.2. National regulations

#### Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 2, hazardous to water (Classification according to VwVwS, Annex 2; WGK No 263)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

#### Denmark

Classification remarks : 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

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

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

Acute Tox. 3 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Flam. Liq. 1	Flammable liquids, Category 1
Skin Corr. 1	Skin corrosion/irritation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H224	Extremely flammable liquid and vapour
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H331	Toxic if inhaled
H335	May cause respiratory irritation
R12	Extremely flammable
R20	Harmful by inhalation
R37/38	Irritating to respiratory system and skin
R41	Risk of serious damage to eyes
F+	Extremely flammable
Xi	Irritant
Xn	Harmful

# METHYLAMINE FOR SYNTHESIS

## Safety Data Sheet

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*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*