

CAS No: MSDS

MATERIAL SAFETY DATA SHEET (MSDS)

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

1.1. Product identifier

Product form : Mixture
:
Product code : 06227

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 - 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 Directive 67/548/EEC or 1999/45/EC

T; R23/24/25
T; R39/23/24/25

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2. Label elements

Labelling according to Directive 67/548/EEC or 1999/45/EC

Hazard symbols :



T - Toxic

- R-phrases : R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed
R39/23/24/25 - Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed
- S-phrases : S4 - Keep away from living quarters
S24 - Avoid contact with skin
S28 - After contact with skin, wash immediately with plenty of ... (to be specified by the manufacturer)
S35 - This material and its container must be disposed of in a safe way
S36/37 - Wear suitable protective clothing and gloves
S38 - In case of insufficient ventilation, wear suitable respiratory equipment
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
S59 - Refer to manufacturer/supplier for information on recovery/recycling

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

| Name | Product identifier | % | Classification according to Directive 67/548/EEC | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--|---|---------|--|--|
| Methanol | (CAS No) 67-56-1 (EC no) 200-659-6 (EC index no) 603-001-00-X | 75 - 99 | F; R11 T; R23/24/25 T; R39/23/24/25 | Flam. Liq. 2, H225 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Oral), H301 STOT SE 1, H370 |
| TETRAMETHYL AMMONIUM HYDROXIDE 25% IN METHANOL | (CAS No) 75-59-2 | 15 - 25 | Not classified | Not classified |

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

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SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------------------------|--|
| First-aid measures general | : Call a POISON CENTER or doctor/physician. Specific treatment (see ... on this label). |
| First-aid measures after inhalation | : Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| First-aid measures after skin contact | : Immediately call a POISON CENTER or doctor/physician. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Specific measures (see ... on this label). Wash contaminated clothing before reuse. |
| First-aid measures after eye contact | : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. |
| First-aid measures after ingestion | : Rinse mouth. Obtain emergency medical attention. 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 damage to organs. Causes severe skin burns and eye damage. |
| Symptoms/injuries after inhalation | : Toxic if inhaled. |
| Symptoms/injuries after skin contact | : Toxic in contact with skin. |
| Symptoms/injuries after ingestion | : Toxic if swallowed. |

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 ₂). |
| Unsuitable extinguishing media | : Do not use a heavy water stream. |

5.2. Special hazards arising from the substance or mixture

| | |
|-------------|---------------------------------------|
| Fire hazard | : Highly flammable liquid and vapour. |
|-------------|---------------------------------------|

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 | : Avoid breathing dust/fume/gas/mist/vapours/spray. |
| 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

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.

7.2. Conditions for safe storage, including any incompatibilities

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

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
Colour : Clear Colorless.
Odour : alcoholic odour.
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : 5.2
Melting point : -97.8 °C
Freezing point : No data available
Boiling point : 63.9 °C
Flash point : 6 °C
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : Flammable

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| | |
|----------------------------------|---------------------------|
| Vapour pressure | : 29 mm Hg (at 20°C) |
| Relative vapour density at 20 °C | : 1.1 |
| Relative density | : No data available |
| Density | : 0.8 g/cm ³ |
| Solubility | : Water: Soluble 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 | : No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Highly flammable liquid and vapour.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

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

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|------------------------|---|
| Acute toxicity | : Toxic by inhalation, in contact with skin and if swallowed. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. |
| Irritation | : Not classified |
| Corrosivity | : Not classified |
| Sensitisation | : Not classified |
| Repeated dose toxicity | : Not classified |
| Carcinogenicity | : Not classified |
| Mutagenicity | : Not classified |

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Toxicity for reproduction : Not classified

Potential adverse human health effects and symptoms : Toxic if swallowed. Toxic 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 recommendations : Dispose of contents/container to ...

Ecology - waste materials : Hazardous waste due to toxicity.

SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR) : 3286

UN-No. (IMDG) : 3286

UN-No.(IATA) : 3286

UN-No.(ADN) : 3286

UN-No. (RID) : 3286

14.2. UN proper shipping name

Proper Shipping Name (ADR) : FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.

Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.

Proper Shipping Name (IATA) : FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.

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| | |
|---------------------------------------|--|
| Proper Shipping Name (ADN) | : FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. |
| Proper Shipping Name (RID) | : FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. |
| Transport document description (ADR) | : UN 3286 FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S., 3 (6.1+8), II, (D/E) |
| Transport document description (IMDG) | : UN 3286 FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S., 3 (6.1+8), II |
| Transport document description (IATA) | : UN 3286 FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S., 3 (6.1+8), II |
| Transport document description (ADN) | : UN 3286 FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S., 3 (6.1+8), II |
| Transport document description (RID) | : UN 3286 FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S., 3 (6.1+8), II |

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3 (6.1, 8)
Danger labels (ADR) : 3, 6.1, 8



IMDG

Transport hazard class(es) (IMDG) : 3 (6.1, 8)
Danger labels (IMDG) : 3, 6.1, 8



IATA

Transport hazard class(es) (IATA) : 3 (6.1, 8)
Hazard labels (IATA) : 3, 6.1, 8



ADN

Transport hazard class(es) (ADN) : 3 (6.1, 8)
Danger labels (ADN) : 3, 6.1, 8



RID

Transport hazard class(es) (RID) : 3 (6.1, 8)
Danger labels (RID) : 3, 6.1, 8

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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) | : FTC |
| Special provision (ADR) | : 274 |
| 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) | : T11 |
| Portable tank and bulk container special provisions (ADR) | : TP2, TP27 |
| Tank code (ADR) | : L4BH |
| Tank special provisions (ADR) | : TU15 |
| Vehicle for tank carriage | : FL |
| Transport category (ADR) | : 2 |
| Special provisions for carriage - Loading, unloading and handling (ADR) | : CV13, CV28 |
| Special provisions for carriage - Operation (ADR) | : S2, S22 |
| Hazard identification number (Kemler No.) | : 368 |
| Orange plates | : |



| | |
|-------------------------------|---------|
| Tunnel restriction code (ADR) | : D/E |
| EAC code | : •3WE |
| APP code | : A(fl) |

- Transport by sea

| | |
|---------------------------------|---------|
| Special provision (IMDG) | : 274 |
| Limited quantities (IMDG) | : 1 L |
| Excepted quantities (IMDG) | : E2 |
| Packing instructions (IMDG) | : P001 |
| IBC packing instructions (IMDG) | : IBC99 |

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| | |
|--------------------------------|-------------------|
| Tank instructions (IMDG) | : T11 |
| Tank special provisions (IMDG) | : TP2, TP13, TP27 |
| EmS-No. (Fire) | : F-E |
| EmS-No. (Spillage) | : S-C |
| Stowage category (IMDG) | : B |
| Stowage and handling (IMDG) | : SW2 |
| Segregation (IMDG) | : SG5, SG8 |
| MFAG-No | : 131 |

- 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) | : 3CP |

- Inland waterway transport

| | |
|-----------------------------------|----------------------|
| Classification code (ADN) | : FTC |
| Special provisions (ADN) | : 274, 802 |
| Limited quantities (ADN) | : 1 L |
| Excepted quantities (ADN) | : E2 |
| Carriage permitted (ADN) | : T |
| Equipment required (ADN) | : PP, EP, EX, TOX, A |
| Ventilation (ADN) | : VE01, VE02 |
| Number of blue cones/lights (ADN) | : 2 |

- Rail transport

| | |
|---|---------------|
| Classification code (RID) | : FTC |
| Special provision (RID) | : 274 |
| 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) | : T11 |
| Portable tank and bulk container special provisions (RID) | : TP2, TP27 |
| Tank codes for RID tanks (RID) | : L4BH |
| Special provisions for RID tanks (RID) | : TU15 |
| Transport category (RID) | : 2 |
| Special provisions for carriage – Loading and unloading (RID) | : CW13, CW28 |
| Colis express (express parcels) (RID) | : CE7 |
| Hazard identification number (RID) | : 368 |

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

Not applicable

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions

Contains no REACH candidate substance

Contains no REACH Annex XIV substances.

15.1.2. National regulations

Germany

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

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

Denmark

Class for fire hazard : Class I-1

Store unit : 1 liter

Classification remarks : F <Flam. Liq. 2>; 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. 3 (Dermal) | Acute toxicity (dermal), Category 3 |
| Acute Tox. 3 (Inhalation) | Acute toxicity (inhal.), Category 3 |
| Acute Tox. 3 (Oral) | Acute toxicity (oral), Category 3 |
| Flam. Liq. 2 | Flammable liquids, Category 2 |
| STOT SE 1 | Specific target organ toxicity — single exposure, Category 1 |
| H225 | Highly flammable liquid and vapour |
| H301 | Toxic if swallowed |
| H311 | Toxic in contact with skin |

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| | |
|--------------|--|
| H331 | Toxic if inhaled |
| H370 | Causes damage to organs |
| R11 | Highly flammable |
| R23/24/25 | Toxic by inhalation, in contact with skin and if swallowed |
| R39/23/24/25 | Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed |
| F | Highly flammable |
| T | Toxic |

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