

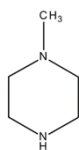
CAS No: 109-01-3 MSDS

MATERIAL SAFETY DATA SHEET (MSDS)

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

1.1. Product identifier

Product form : Substance
Trade name : N-METHYLPIPERAZINE FOR SYNTHESIS
EC no : 203-639-5
CAS No : 109-01-3
Product code : 4671D
Chemical structure :



Synonyms : 1-Methylpiperazine

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 Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, H226
Category 3
Acute toxicity (dermal), H312
Category 4
Acute toxicity (inhal.), H331
Category 3
Skin corrosion/irritation, H314
Category 1B

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

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

T; R10-20/21-34

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) :

H226 - Flammable liquid and vapour
H312 - Harmful in contact with skin
H314 - Causes severe skin burns and eye damage
H331 - Toxic if inhaled

Precautionary statements (CLP) :

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 : N-METHYLPIPERAZINE FOR SYNTHESIS
CAS No : 109-01-3
EC no : 203-639-5

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. Immediately call a POISON CENTER or doctor/physician.
- First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. 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.
- 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. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

- Symptoms/injuries : Causes severe skin burns and eye damage.
- 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.

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 (CO₂).
- Unsuitable extinguishing media : Do not use extinguishing media containing water.

5.2. Special hazards arising from the substance or mixture

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

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

- 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 : Ventilate area.

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. Do not breathe dust/fume/gas/mist/vapours/spray. |
| Hygiene measures | : Wash ... thoroughly after handling. Wash contaminated clothing before reuse. |

7.2. Conditions for safe storage, including any incompatibilities

| | |
|------------------------|---|
| Technical measures | : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/... equipment. Comply with applicable regulations. |
| Storage conditions | : 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 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 |
| Colour | : Clear Colorless. |
| Odour | : ammonia odour. |
| Odour threshold | : No data available |
| pH | : 11 - 12 |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : -60 °C |
| Freezing point | : No data available |
| Boiling point | : 138 °C |
| Flash point | : 39 °C |
| Auto-ignition temperature | : 3200 °C |

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| | |
|----------------------------------|-------------------------------|
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : Flammable liquid and vapour |
| Vapour pressure | : 0.9 kPa at 200C |
| Relative vapour density at 20 °C | : 3.46 |
| Relative density | : No data available |
| Density | : 0.9 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 | : 0.012 - 0.099 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

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

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

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

May release flammable gases. Thermal decomposition generates : Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Dermal: Harmful in contact with skin. Inhalation: Toxic if inhaled.

Skin corrosion/irritation : Causes severe skin burns and eye damage.
pH: 11 - 12

Serious eye damage/irritation : Serious eye damage, category 1, implicit
pH: 11 - 12

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

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Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms : 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 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

14.1. UN number

UN-No. (ADR) : 2734

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| | |
|---------------|--------|
| UN-No. (IMDG) | : 2734 |
| UN-No.(IATA) | : 2734 |
| UN-No.(ADN) | : 2734 |
| UN-No. (RID) | : 2734 |

14.2. UN proper shipping name

| | |
|---------------------------------------|---|
| Proper Shipping Name (ADR) | : AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S. / POLYAMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S. |
| Proper Shipping Name (IMDG) | : AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S. |
| Proper Shipping Name (IATA) | : AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S. |
| Proper Shipping Name (ADN) | : AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S. |
| Proper Shipping Name (RID) | : AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S. |
| Transport document description (ADR) | : UN 2734 AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S. / POLYAMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S., 8 (3), II, (D/E) |
| Transport document description (IMDG) | : UN 2734 AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S., 8 (3), II |
| Transport document description (IATA) | : UN 2734 AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S., 8 (3), II |
| Transport document description (ADN) | : UN 2734 AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S., 8 (3), II |
| Transport document description (RID) | : UN 2734 AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S., 8 (3), II |

14.3. Transport hazard class(es)

ADR

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



IMDG

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



IATA

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



ADN

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

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RID

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

Danger labels (RID) : 8, 3



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) : CF1

Special provision (ADR) : 274

Limited quantities (ADR) : 1L

Excepted quantities (ADR) : E2

Packing instructions (ADR) : P001, IBC02

Mixed packing provisions (ADR) : MP15

Portable tank and bulk container instructions (ADR) : T11

Portable tank and bulk container special provisions (ADR) : TP2, TP27

Tank code (ADR) : L4BN

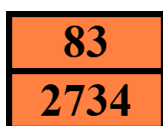
Vehicle for tank carriage : FL

Transport category (ADR) : 2

Special provisions for carriage - Operation (ADR) : S2

Hazard identification number (Kemler No.) : 83

Orange plates :



Hazard identification number (Kemler No.) : 83

Orange plates :

Tunnel restriction code (ADR) : D/E

EAC code : •2W

APP code : A(fl)

- Transport by sea

Special provision (IMDG) : 274

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| | |
|---------------------------------|-------------|
| Limited quantities (IMDG) | : 1 L |
| Excepted quantities (IMDG) | : E2 |
| Packing instructions (IMDG) | : P001 |
| IBC packing instructions (IMDG) | : IBC02 |
| Tank instructions (IMDG) | : T11 |
| Tank special provisions (IMDG) | : TP2, TP27 |
| EmS-No. (Fire) | : F-E |
| EmS-No. (Spillage) | : S-C |
| Stowage category (IMDG) | : A |
| Segregation (IMDG) | : SG35 |
| MFAG-No | : 132 |

- Air transport

| | |
|--|--------|
| PCA Excepted quantities (IATA) | : E2 |
| PCA Limited quantities (IATA) | : Y840 |
| PCA limited quantity max net quantity (IATA) | : 0.5L |
| PCA packing instructions (IATA) | : 851 |
| PCA max net quantity (IATA) | : 1L |
| CAO packing instructions (IATA) | : 855 |
| CAO max net quantity (IATA) | : 30L |
| ERG code (IATA) | : 8F |

- Inland waterway transport

| | |
|-----------------------------------|-----------------|
| Classification code (ADN) | : CF1 |
| Special provisions (ADN) | : 274 |
| Limited quantities (ADN) | : 1 L |
| Excepted quantities (ADN) | : E2 |
| Equipment required (ADN) | : PP, EP, EX, A |
| Ventilation (ADN) | : VE01 |
| Number of blue cones/lights (ADN) | : 1 |

- Rail transport

| | |
|---|---------------|
| Classification code (RID) | : CF1 |
| Special provision (RID) | : 274 |
| Limited quantities (RID) | : 1L |
| Excepted quantities (RID) | : E2 |
| Packing instructions (RID) | : P001, IBC02 |
| Mixed packing provisions (RID) | : MP15 |
| Portable tank and bulk container instructions (RID) | : T11 |
| Portable tank and bulk container special provisions (RID) | : TP2, TP27 |
| Tank codes for RID tanks (RID) | : L4BN |
| Transport category (RID) | : 2 |
| Colis express (express parcels) (RID) | : CE6 |
| Hazard identification number (RID) | : 83 |

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

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No REACH Annex XVII restrictions

N-METHYLPIPERAZINE FOR SYNTHESIS is not on the REACH Candidate List

N-METHYLPIPERAZINE FOR SYNTHESIS is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 1, slightly hazardous to water (KBwS-Beschluss; WGK No 1602)

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 II-1

Store unit : 5 liter

Classification remarks : R10 <H226;H312;H314;H331>; 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 (Inhalation) | Acute toxicity (inhal.), Category 3 |
| Acute Tox. 4 (Dermal) | Acute toxicity (dermal), Category 4 |
| Flam. Liq. 3 | Flammable liquids, Category 3 |
| Skin Corr. 1B | Skin corrosion/irritation, Category 1B |
| H226 | Flammable liquid and vapour |
| H312 | Harmful in contact with skin |
| H314 | Causes severe skin burns and eye damage |
| H331 | Toxic if inhaled |
| R10 | Flammable |
| R20/21 | Harmful by inhalation and in contact with skin |
| R34 | Causes burns |
| T | Toxic |

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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