MATERIAL SAFETY DATA SHEET (MSDS)

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

1.1. Product identifier

Product form: Substance
EC Index-No.: 603-070-00-6
EC-No.: 204-709-8
CAS-No.: 124-68-5
Product code: 01045
Chemical structure:

\[
\begin{align*}
  &\text{H}_3\text{C} \\
  &\text{H}_2\text{N} \\
  &\text{CH}_3 \\
&\text{OH}
\end{align*}
\]

Synonyms: β-Aminoisobutyl alcohol / AMP

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]

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/eye irritation, Category 2</td>
<td>H318</td>
</tr>
<tr>
<td>Skin corrosion/irritation, Category 2</td>
<td>H315</td>
</tr>
<tr>
<td>Hazardous to the aquatic environment — Chronic Hazard, Category 3</td>
<td>H412</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements: see section 16
Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]
Xi: R36/38
R52/53
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) : GHS07

Signal word (CLP) : Warning
Hazard statements (CLP) : H315 - Causes skin irritation.
                        : H319 - Causes serious eye irritation.
                        : H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP) : P273 - Avoid release to the environment.
                               : P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.
                               : Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards
No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances
Name : 2-AMINO-2-METHYL-PROPANOL Extra Pure
CAS-No. : 124-68-5
EC-No. : 204-709-8
EC Index-No. : 603-070-00-6

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

3.2. Mixtures
Not applicable
SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: Assure fresh air breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact: Wash with plenty of water/…. Wash contaminated clothing before reuse. Get medical advice/attention.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion: Rinse mouth. Do not induce vomiting. Get medical advice/attention.

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

Symptoms/effects after skin contact: Causes skin irritation.

Symptoms/effects after eye contact: Causes serious eye irritation.

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

No additional information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media


Unsuitable extinguishing media: Do not use extinguishing media containing water.

5.2. Special hazards arising from the substance or mixture

No additional information available.

5.3. Advice for firefighters

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

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: Ventilate area.

6.2. Environmental precautions

Harmful to aquatic life with long lasting effects.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: On land, sweep or shovel into suitable containers. Collect spillage.

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: Avoid contact with skin and eyes. Do not breathe vapours. Provide good ventilation in process area to prevent formation of vapour.

Hygiene measures: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a well-ventilated place. Keep container tightly closed.

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: [In case of inadequate ventilation] wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Colour: Clear viscous.
Odour: No data available
Odour threshold: No data available
pH: 11 - 12
Relative evaporation rate (butylacetate=1): No data available
Melting point: 24 - 28 °C
Freezing point: No data available
Boiling point: 165 °C
Flash point: 68 °C
Auto-ignition temperature: 438 °C
Decomposition temperature: No data available
Flammability (solid, gas): No data available
Vapour pressure: < 0.1 hPa at 20°C
Relative vapour density at 20 °C: 3
Relative density: No data available
Density: 0.934 g/cm³
2-AMINO-2-METHYL-PROPANOL Extra Pure
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

<table>
<thead>
<tr>
<th>Solubility</th>
<th>Water: 8.9 g/l at 20 °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Pow</td>
<td>-0.63</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

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
No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity   : Not classified

Skin corrosion/irritation : Causes skin irritation.
                         : pH: 11 - 12
Serious eye damage/irritation : Causes serious eye irritation.
                            : pH: 11 - 12
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity       : Not classified
Carcinogenicity             : Not classified
Reproductive toxicity       : Not classified
STOT-single exposure        : Not classified
STOT-repeated exposure      : Not classified
2-AMINO-2-METHYL-PROPANOL Extra Pure
Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity
Ecology - water : Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>2-AMINO-2-METHYL-PROPANOL Extra Pure (124-68-5)</th>
<th>Persistence and degradability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>May cause long-term adverse effects in the environment.</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>2-AMINO-2-METHYL-PROPANOL Extra Pure (124-68-5)</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-0.63</td>
</tr>
</tbody>
</table>

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 hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 14: Transport information

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

14.1. UN number

<table>
<thead>
<tr>
<th>UN-No.</th>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>(ADR)</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>(IMDG)</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>(IATA)</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>(ADN)</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>(RID)</td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

14.2. UN proper shipping name

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name (ADR)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Proper Shipping Name (IMDG)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
2-AMINO-2-METHYL-PROPANOL Extra Pure
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)

ADR
Transport hazard class(es) (ADR) : Not applicable

IMDG
Transport hazard class(es) (IMDG) : Not applicable

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

ADN
Transport hazard class(es) (ADN) : Not applicable

RID
Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

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) : C9
  Special provisions (ADR) : 274
  Limited quantities (ADR) : 5l
  Packing instructions (ADR) : P001, IBC03, LP01, R001
  Mixed packing provisions (ADR) : MP19
  Portable tank and bulk container instructions (ADR) : T7
  Portable tank and bulk container special provisions (ADR) : TP1, TP28
  Tank code (ADR) : L4BN
  Vehicle for tank carriage : AT
  Transport category (ADR) : 3
  Special provisions for carriage - Packages (ADR) : V12
  Hazard identification number (Kemler No.) : 80
  Tunnel restriction code (ADR) : E
  EAC code : 2X
  APP code : B
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
2-AMINO-2-METHYL-PROPANOL Extra Pure is not on the REACH Candidate List
2-AMINO-2-METHYL-PROPANOL Extra Pure is not on the REACH Annex XIV List

15.1.2. National regulations

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

Netherlands
SZW-lijst van kankerverwekkende stoffen : The substance is not listed
SZW-lijst van mutagene stoffen : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

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
15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

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

| Aquatic Chronic 3 | Hazardous to the aquatic environment — Chronic Hazard, Category 3 |
| Eye Irrit. 2      | Serious eye damage/eye irritation, Category 2 |
| Skin Irrit. 2     | Skin corrosion/irritation, Category 2 |
| H315              | Causes skin irritation. |
| H319              | Causes serious eye irritation. |
| H412              | Harmful to aquatic life with long lasting effects. |
| R36/38            | Irritating to eyes and skin |
| R52/53            | Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment |
| Xi                | Irritant |

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.