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.: 115-69-5
Product code: 01044
Chemical structure:

\[
\begin{align*}
\text{HO} & \hspace{1cm} \text{H}_2\text{N} & \hspace{1cm} \text{OH} \\
\text{H}_2\text{N} & \hspace{1cm} \text{CH}_3
\end{align*}
\]

Synonyms: AMPD / Ammediol

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]

- Serious eye damage/eye irritation, Category 2
  - H319
- Skin corrosion/irritation, Category 2
  - H315
- Specific target organ toxicity — Single exposure, Category 3,
  Respiratory tract irritation
  - H335

Full text of hazard classes and H-statements: see section 16
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Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]
Xi: R36
Xi: R37
Xi: R38
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.
H335 - May cause respiratory irritation.

Precautionary statements (CLP):
P261 - Avoid breathing vapours, dust, fume, gas.
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-1,3 PROPANEDIOL AR
CAS-No.: 115-69-5

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:
Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
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 inhalation: May cause respiratory irritation.
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
Treat symptomatically.

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
Avoid release to the environment.

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

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. Use only outdoors or in a well-ventilated area. Do not breathe vapours.
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: Keep container tightly closed. Store in a dry place.
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 : Solid
Colour : White powder.
Odour : No data available
Odour threshold : No data available
pH : 10.5 - 11.5
Relative evaporation rate (butylacetate=1) : No data available
Melting point : 100 - 110 °C
Freezing point : No data available
Boiling point : 151 °C
Flash point : No data available
Auto-ignition temperature : No data available
 Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapour pressure : No data available
Relative vapour density at 20 °C : 3.63
Relative density : No data available
Solubility : Water: Soluble in water
Log Pow : No data available
Viscosity, kinematic : No data available
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<table>
<thead>
<tr>
<th>Property</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<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
Oxidizing agent.

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: 10.5 - 11.5
Serious eye damage/irritation : Causes serious eye irritation.
  pH: 10.5 - 11.5
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : May cause respiratory irritation.
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified
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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  
No additional information available

SECTION 14: Transport information

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

14.1. UN number

<table>
<thead>
<tr>
<th>Description</th>
<th>UN-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN-No. (ADR)</td>
<td>3259</td>
</tr>
<tr>
<td>UN-No. (IMDG)</td>
<td>3259</td>
</tr>
<tr>
<td>UN-No. (IATA)</td>
<td>3259</td>
</tr>
<tr>
<td>UN-No. (ADN)</td>
<td>3259</td>
</tr>
<tr>
<td>UN-No. (RID)</td>
<td>3259</td>
</tr>
</tbody>
</table>

14.2. UN proper shipping name

<table>
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<th>Description</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Proper Shipping Name (ADR)</td>
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</tr>
<tr>
<td>Proper Shipping Name (IMDG)</td>
<td>AMINES, SOLID, CORROSIVE, N.O.S.</td>
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<tr>
<td>Proper Shipping Name (IATA)</td>
<td>Amines, solid, corrosive, n.o.s.</td>
</tr>
<tr>
<td>Proper Shipping Name (ADN)</td>
<td>AMINES, SOLID, CORROSIVE, N.O.S.</td>
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<tr>
<td>Proper Shipping Name (RID)</td>
<td>AMINES, SOLID, CORROSIVE, N.O.S.</td>
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<tr>
<td>Transport document description (ADR)</td>
<td>UN 3259 AMINES, SOLID, CORROSIVE, N.O.S., 8, III (E)</td>
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<tr>
<td>Transport document description (IMDG)</td>
<td>UN 3259 AMINES, SOLID, CORROSIVE, N.O.S., 8, III</td>
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<tr>
<td>Transport document description (IATA)</td>
<td>UN 3259 Amines, solid, corrosive, n.o.s., 8, III</td>
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<td>Transport document description (ADN)</td>
<td>UN 3259 AMINES, SOLID, CORROSIVE, N.O.S., 8, III</td>
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<tr>
<td>Transport document description (RID)</td>
<td>UN 3259 AMINES, SOLID, CORROSIVE, N.O.S., 8, III</td>
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<table>
<thead>
<tr>
<th>14.3. Transport hazard class(es)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ADR</strong></td>
</tr>
</tbody>
</table>
| 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  
| Danger labels (RID) | 8  

<table>
<thead>
<tr>
<th>14.4. Packing group</th>
</tr>
</thead>
</table>
| Packing group (ADR) | III  
| Packing group (IMDG) | III  
| Packing group (IATA) | III  
| Packing group (ADN) | III  

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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): C8
Special provisions (ADR): 274
Limited quantities (ADR): 5kg
Excepted quantities (ADR): E1
Packing instructions (ADR): P002, IBC08, LP02, R001
Special packing provisions (ADR): B3
Mixed packing provisions (ADR): MP10
Portable tank and bulk container instructions (ADR): T1
Portable tank and bulk container special provisions (ADR): TP33
Tank code (ADR): SGAV, L4BN
Vehicle for tank carriage: AT
Transport category (ADR): 3
Special provisions for carriage - Bulk (ADR): VC1, VC2, AP7
Hazard identification number (Kemler No.): 80
Orange plates: 80
Tunnel restriction code (ADR): E
EAC code: 2X

- Transport by sea
Special provisions (IMDG): 223, 274
Packing instructions (IMDG): P002, LP02
IBC packing instructions (IMDG): IBC08
IBC special provisions (IMDG): B3
Tank instructions (IMDG): T1
Tank special provisions (IMDG): TP33
EmS-No. (Fire): F-A
EmS-No. (Spillage): S-B
Stowage category (IMDG): A
Segregation (IMDG): SG35
Properties and observations (IMDG): Colourless to yellowish solids with a pungent odour. Miscible with or soluble in water. When involved in a fire, evolve toxic gases. Corrosive to most metals, especially to copper and its alloys. Cause burns to skin, eyes and mucous membranes. React violently with acids.
MFAG-No: 154

- Air transport
PCA Excepted quantities (IATA): E1
PCA Limited quantities (IATA): Y845
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<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>PCA limited quantity max net quantity (IATA)</td>
<td>5kg</td>
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<tr>
<td>PCA packing instructions (IATA)</td>
<td>860</td>
</tr>
<tr>
<td>PCA max net quantity (IATA)</td>
<td>25kg</td>
</tr>
<tr>
<td>CAO packing instructions (IATA)</td>
<td>864</td>
</tr>
<tr>
<td>CAO max net quantity (IATA)</td>
<td>100kg</td>
</tr>
<tr>
<td>Special provisions (IATA)</td>
<td>A3, A803</td>
</tr>
<tr>
<td>ERG code (IATA)</td>
<td>8L</td>
</tr>
</tbody>
</table>

**- Inland waterway transport**

| Classification code (ADN) | C8 |
| Special provisions (ADN) | 274 |
| Limited quantities (ADN) | 5 kg |
| 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) | C8 |
| Special provisions (RID) | 274 |
| Excepted quantities (RID) | E1 |
| Packing instructions (RID) | P002, IBC08, LP02, R001 |
| Special packing provisions (RID) | B3 |
| Mixed packing provisions (RID) | MP10 |
| Portable tank and bulk container instructions (RID) | T1 |
| Portable tank and bulk container special provisions (RID) | TP33 |
| Tank codes for RID tanks (RID) | SGAV, L4BN |
| Transport category (RID) | 3 |
| Special provisions for carriage – Bulk (RID) | VC1, VC2, AP7 |
| Colis express (express parcels) (RID) | CE11 |
| Hazard identification number (RID) | 80 |

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-1,3 PROPANEDIOL AR is not on the REACH Candidate List

2-AMINO-2-METHYL-1,3 PROPANEDIOL AR is not on the REACH Annex XIV List

**15.1.2. National regulations**
15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

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

<table>
<thead>
<tr>
<th>R-</th>
<th>EUH-</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Irrit. 2</td>
<td>EUH2</td>
<td>Serious eye damage/eye irritation, Category 2</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>EUH2</td>
<td>Skin corrosion/irritation, Category 2</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>EUH3</td>
<td>Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation</td>
</tr>
<tr>
<td>H315</td>
<td></td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>H319</td>
<td></td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>H335</td>
<td></td>
<td>May cause respiratory irritation.</td>
</tr>
<tr>
<td>R36</td>
<td></td>
<td>Irritating to eyes</td>
</tr>
<tr>
<td>R37</td>
<td></td>
<td>Irritating to respiratory system</td>
</tr>
<tr>
<td>R38</td>
<td></td>
<td>Irritating to skin</td>
</tr>
<tr>
<td>Xi</td>
<td></td>
<td>Irritant</td>
</tr>
</tbody>
</table>

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.