### AMMONIA 1 MOL/L (1N) FOR 1000 ML TRACEABLE TO NIST MSDS



### CAS-No.: MSDS

### **MATERIAL SAFETY DATA SHEET (MSDS)**

SECTION 1: Identification	n of the substance/mixture and of the company/undertaking
1.1. Product identifie	
Product form	: Mixture
Product code	: C200A
4.0 Delevent identifi	
	ed uses of the substance or mixture and uses advised against
1.2.1. Relevant identified Use of the substance/mixtu	
	ure : Laboratory chemicals, Manufacture of substances
1.2.2. Uses advised ag	ainst
No additional information a	
	pplier of the safety data sheet
LOBA CHEMIE PVT.LTD. 107 Wode House Road, Je	ahangir Villa, Colaba
400005 Mumbai - INDIA	
T +91 22 6663 6663 - F +9	
info@lobachemie.com - w	<u>ww.iobachemie.com</u>
1.4. Emergency telep	phone number
Emergency number	: + 91 22 6663 6663 (9:00am - 6:00 pm)
SECTION 2: Hazards ide	ntification
2.1. Classification of	the substance or mixture
Classification according	to Regulation (EC) No. 1272/2008 [CLP]
Skin corrosion/irritation,	H314
Category 1B	11005
Specific target organ toxicity — Single	H335
exposure, Category 3,	

exposure, Category 3, Respiratory tract irritation Hazardous to the aquatic H400 environment — Acute Hazard, Category 1

Full text of hazard classes and H-statements : see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

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0.0 Label damanta	
2.2. Label elements	
Labelling according to Regulation (EC)	No. 1272/2008 [CLP]
Hazard pictograms (CLP)	
	GHS05 GHS07 GHS09
Signal word (CLP)	: Danger
Hazard statements (CLP)	<ul> <li>H314 - Causes severe skin burns and eye damage.</li> <li>H335 - May cause respiratory irritation.</li> <li>H400 - Very toxic to aquatic life.</li> </ul>
Precautionary statements (CLP)	<ul> <li>P273 - Avoid release to the environment.</li> <li>P280 - Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.</li> <li>Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P310 - Immediately call a POISON CENTER or doctor.</li> <li>P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.</li> </ul>

#### 2.3. Other hazards

**Mixtures** 

3.2.

No additional information available

SECT	ION 3: Composition/information on ingredients
3.1.	Substances
Not ap	oplicable

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Water	(CAS-No.) 7732-18-5 (EC-No.) 231-791-2	75 - 99	Not classified
Ammonia solution	(CAS-No.) 1336-21-6 (EC-No.) 215-647-6 (EC Index-No.) 007-001-01-2	10 - 15	Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400

Full text of H-statements: see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures after inhalation
  - P P P

: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

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First-aid measures after skin contact	: Wash with plenty of water/ Take off immediately all contaminated clothing. Get immediate 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. Immediately call a POISON CENTER/doctor.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.
4.2. Most important symptoms and e	effects, both acute and delayed
Symptoms/effects	: Causes severe skin burns and eye damage.
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after ingestion	: Harmful if swallowed.
<b>4.3.</b> Indication of any immediate med No additional information available	dical attention and special treatment needed
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Carbon dioxide. Dry powder. Foam. Water spray.
Unsuitable extinguishing media	: Do not use extinguishing media containing water.
5.2. Special hazards arising from the No additional information available	e substance or mixture
5.3. Advice for firefighters	
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release measure	S
6.1. Personal precautions, protective	e 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.
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for contai	nment 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.
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, incl	luding any incompatibilities
Storage conditions	: Store in a well-ventilated place. Keep container tightly closed.
7.3. Specific end use(s)	
<b>N N N N N N N N N N</b>	
No additional information available	

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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	: [In case of inadequate ventilation] wear respiratory protection.	
SECTION 9: Physical and chemical properties		
9.1. Information on basic physical a Physical state	nd chemical properties : Liquid	
Colour	: Clear Colorless.	
Odour	: No data available	
Odour threshold	: No data available	
	: No data available	
Relative evaporation rate (butylacetate=1)	: No data available	
Melting point	: No data available	
Freezing point	: No data available	
Boiling point	: No data available	
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	: No data available	
Relative density	: No data available	
Solubility	: No data available	
Log Pow	: No data available	
Viscosity, kinematic	: No data available	
Viscosity, dynamic	: No data available	
Explosive properties	: No data available	

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Oxidising properties	: No data available
Explosive limits	: No data available
0.0 Other information	
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.	
Stable under normal conditions.	
10.3. Possibility of hazardous reaction	ons
No additional information available	
10.4. Conditions to avoid	
Direct sunlight.	
10.5. Incompatible materials	
No additional information available	
10.C Upperdaug deserves sition and	ducto
<b>10.6.</b> Hazardous decomposition prov Thermal decomposition generates : Corro	
SECTION 11: Toxicological information	
11.1. Information on toxicological ef	ffects
Acute toxicity	: Not classified
Skin corrosion/irritation	
	: Causes severe skin burns and eye damage.
Serious eye damage/irritation	: Serious eye damage, category 1, implicit
Serious eye damage/irritation Respiratory or skin sensitisation	: Serious eye damage, category 1, implicit : Not classified
Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity	<ul> <li>Serious eye damage, category 1, implicit</li> <li>Not classified</li> <li>Not classified</li> </ul>
Serious eye damage/irritation Respiratory or skin sensitisation	: Serious eye damage, category 1, implicit : Not classified
Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity	<ul> <li>Serious eye damage, category 1, implicit</li> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> </ul>
Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity	<ul> <li>Serious eye damage, category 1, implicit</li> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> </ul>
Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity	<ul> <li>Serious eye damage, category 1, implicit</li> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> </ul>
Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity	<ul> <li>Serious eye damage, category 1, implicit</li> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> </ul>
Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity STOT-single exposure	<ul> <li>Serious eye damage, category 1, implicit</li> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> <li>May cause respiratory irritation.</li> </ul>
Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity STOT-single exposure	<ul> <li>Serious eye damage, category 1, implicit</li> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> <li>May cause respiratory irritation.</li> </ul>

#### **SECTION 12: Ecological information**

- 12.1. Toxicity
- No additional information available

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42.0 Development of any debility	
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 asses	sment
No additional information available	
12.6. Other adverse effects	
No additional information available	
SECTION 13: Disposal considerations	
13.1. Waste treatment methods	Dispass of contents/container to hererdays or creately waste collection mainty in
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 / IA	TA / ADN
14.1. UN number	. 0070
UN-No. (ADR)	: 2672 : 2672
UN-No. (IMDG)	: 2672
UN-No. (IATA) UN-No. (ADN)	: 2672
UN-No. (RID)	: 2672
	. 2012
14.2. UN proper shipping name	
Proper Shipping Name (ADR)	: AMMONIA SOLUTION
Proper Shipping Name (IMDG)	: AMMONIA SOLUTION
Proper Shipping Name (IATA)	: Ammonia solution
Proper Shipping Name (ADN)	: AMMONIA SOLUTION
Proper Shipping Name (RID)	: AMMONIA SOLUTION
Transport document description (ADR)	: UN 2672 AMMONIA SOLUTION, 8, III, (E), ENVIRONMENTALLY HAZARDOUS
Transport document description (IMDG)	: UN 2672 AMMONIA SOLUTION, 8, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
Transport document description (IATA)	: UN 2672 Ammonia solution, 8, III, ENVIRONMENTALLY HAZARDOUS
Transport document description (IATA) Transport document description (ADN)	: UN 2672 AMMONIA SOLUTION, 8, III, ENVIRONMENTALLY HAZARDOUS : UN 2672 AMMONIA SOLUTION, 8, III, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID)	: UN 2672 AMMONIA SOLUTION, 8, III, ENVIRONMENTALL'I HAZARDOUS : UN 2672 AMMONIA SOLUTION, 8, III, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)	
ADR	
Transport hazard class(es) (ADR)	: 8
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: 8

: 8

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Danger labels (ADR)



#### IMDG

Transport hazard class(es) (IMDG) Danger labels (IMDG)



#### ΙΑΤΑ

Transport hazard class(es) (IATA) Hazard labels (IATA)

: 8 : 8



#### ADN

Transport hazard class(es) (ADN)	
Danger labels (ADN)	





#### RID

Transport hazard class(es) (RID) Danger labels (RID)

### : 8 : 8



14.4. Packing group	
Packing group (ADR)	: 111
Packing group (IMDG)	: 111
Packing group (IATA)	: 111
Packing group (ADN)	: 111
Packing group (RID)	: 111
14.5. Environmental hazards	
Dangerous for the environment	: Yes

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Marine pollutant	: Yes
Other information	: No supplementary information available

14.6. Special precautions for user	
- Overland transport	
Classification code (ADR)	: C5
Special provisions (ADR)	: 543
Limited quantities (ADR)	: 51
Excepted quantities (ADR)	: E1
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
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
Orange plates	<b>80</b> <b>2672</b>
Funnel restriction code (ADR)	: E
EAC code	: 2R
- Transport by sea	· D001   D01
Packing instructions (IMDG)	: P001, LP01
IBC packing instructions (IMDG)	: IBC03
IBC special provisions (IMDG)	: B11
Tank instructions (IMDG)	: T7 . TP2
Tank special provisions (IMDG)	: TP2
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	
Stowage and handling (IMDG)	: SW2, SW5
Segregation (IMDG)	: SG35
Properties and observations (IMDG)	<ul> <li>Colourless liquid with a pungent odour.Corrosive to copper, nickel, zinc and tin and their alloys such as brass. Not significantly corrosive to iron and steel. Reacts violently with acids. Liquid and vapour cause burns to skin, eyes and mucous membranes.</li> </ul>
MFAG-No	: 154
Air transport	
Air transport	· E1
PCA Excepted quantities (IATA)	: E1 · V9/1
PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA)	: Y841 : 1L
PCA packing instructions (IATA)	: 852
PCA max net quantity (IATA)	: 52 : 5L
CAO packing instructions (IATA)	: 856
CAO max net quantity (IATA)	: 60L

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Special provisions (IATA)	: A64, A803
ERG code (IATA)	: 8L
Inland waterway transport	
Classification code (ADN)	: C5
Special provisions (ADN)	: 543
_imited quantities (ADN)	: 5 L
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)	: C5
Special provisions (RID)	: 543
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container nstructions (RID)	: T7
Portable tank and bulk container special provisions (RID)	: TP1
Tank codes for RID tanks (RID)	: L4BN
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Colis express (express parcels) (RID)	: CE8
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

Contains no REACH substances with Annex XVII restrictions Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

#### 15.1.2. National regulations

#### Germany

Reference to AwSV	: Water hazard class (WGK) 3, severe hazard to water (Classification according to AwSV, Annex 1)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

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Netherlands	
SZW-lijst van kankerverwekkende stoffen	: None of the components are listed
SZW-lijst van mutagene stoffen	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	: None of the components are listed
Denmark	
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 H- and EUH-statements:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.

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