# AMMONIA 0.1 MOL/L (0.1N) FOR 1000 ML TRACEABLE TO NIST MSDS



### CAS-No.: MSDS

### MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification	on of the substance/mixture and of the company/undertaking
1.1. Product identifi	
Product form	: Mixture
	:
Product code	: C200B
4.0 Delevent identi	
	fied uses of the substance or mixture and uses advised against
<b>1.2.1.</b> Relevant identit Use of the substance/mix	
1.2.2. Uses advised a	gainst
No additional information	available
1.3. Details of the s	upplier of the safety data sheet
Labogens Fine Chem Ind	
1st Floor , Above Bank of	f India, Guru Vihar , Rahon Road,
Ludhiana Pb. (141007) +91 9316777775, +91 77	07855700
sales@labogens.com	
1.4. Emergency tele	
Emergency number	: +91 7707855700 (9:00am - 6:00 pm)
SECTION 2: Hazards ide	entification
2.1. Classification of	of the substance or mixture
	g to Regulation (EC) No. 1272/2008 [CLP]
Skin corrosion/irritation, Category 1A	H314
Specific target organ	H335
toxicity — Single	
exposure, Category 3, Respiratory tract irritation	1
Hazardous to the aquatic	
environment — Acute Hazard, Category 1	
nazaru, Calegury i	
Full text of hazard classes	s and H-statements : 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 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>P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.</li> <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> </ul>

#### 2.3. **Other hazards**

No additional information available

ubstances			
ble			
	ble		

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Water	(CAS-No.) 7732-18-5 (EC-No.) 231-791-2	>= 99	Not classified
Ammonia solution	(CAS-No.) 1336-21-6 (EC-No.) 215-647-6 (EC Index-No.) 007-001-01-2	1 - 5	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**

#### **Description of first aid measures** 4.1.

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.

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First-aid measures after skin contact	: Wash with plenty of water/ Get medical advice/attention.	
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if pre and easy to do. Continue rinsing. Get medical advice/attention.	sent
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Get medical advice/attention.	
.2. Most important symptoms ar	nd effects, both acute and delayed	
Symptoms/effects after skin contact	: Causes skin irritation.	
Symptoms/effects after ingestion	: Fatal if swallowed.	
4.3. Indication of any immediate r	medical attention and special treatment needed	
Treat symptomatically.		
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 substance or mixture	
No additional information available		
5.3. Advice for firefighters		
Protection during firefighting	<ul> <li>Do not enter fire area without proper protective equipment, including respirator protection.</li> </ul>	y
SECTION 6: Accidental release meas	ures	
6.1. Personal precautions, protec	tive equipment and emergency procedures	
6.1.1. For non-emergency personne		
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 cor		
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.	
	including any incompatibilities	
7.2. Conditions for safe storage, i		
	: Store in a well-ventilated place. Keep container tightly closed.	
<ul> <li>7.2. Conditions for safe storage, i</li> <li>Storage conditions</li> <li>7.3. Specific end use(s)</li> </ul>	: Store in a well-ventilated place. Keep container tightly closed.	
Storage conditions	: Store in a well-ventilated place. Keep container tightly closed.	
Storage conditions 7.3. Specific end use(s)		
Storage conditions         7.3.       Specific end use(s)         No additional information available		
Storage conditions 7.3. Specific end use(s) No additional information available SECTION 8: Exposure controls/perso		3/

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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 prop	perties
9.1. Information on basic physical a	
Physical state	: Liquid
Colour	: Clear Colorless.
Odour	: No data available
Odour threshold	: No data available
рН	: 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
Oxidising properties	: No data available
Explosive limits	: No data available

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9.2. Other information	
No additional information available	
SECTION 10: Stability and reactivity	
10.1. Reactivity	
10.1. Reactivity No additional information available	
10.2. Chemical stability	
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	
	dura de
10.6. Hazardous decomposition proc	aucts
No additional information available	
SECTION 11: Toxicological information	
11.1. Information on toxicological ef	fects
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11.1. Information on toxicological ef	fects : Not classified
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<b>11.1.</b> Information on toxicological ef         Acute toxicity         Skin corrosion/irritation         Serious eye damage/irritation	fects <ul> <li>Not classified</li> <li>Causes severe skin burns and eye damage.</li> <li>Serious eye damage, category 1, implicit</li> </ul>
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11.1. Information on toxicological ef         Acute toxicity         Skin corrosion/irritation         Serious eye damage/irritation         Respiratory or skin sensitisation	fects <ul> <li>Not classified</li> <li>Causes severe skin burns and eye damage.</li> <li>Serious eye damage, category 1, implicit</li> <li>Not classified</li> </ul>
<b>11.1.</b> Information on toxicological ef         Acute toxicity         Skin corrosion/irritation         Serious eye damage/irritation         Respiratory or skin sensitisation         Germ cell mutagenicity	fects  : Not classified  : Causes severe skin burns and eye damage.  : Serious eye damage, category 1, implicit  : Not classified  : Not classified
<b>11.1.</b> Information on toxicological eff         Acute toxicity         Skin corrosion/irritation         Serious eye damage/irritation         Respiratory or skin sensitisation         Germ cell mutagenicity         Carcinogenicity	<ul> <li>fects <ul> <li>Not classified</li> </ul> </li> <li>Causes severe skin burns and eye damage.</li> <li>Serious eye damage, category 1, implicit</li> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> </ul>
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<b>11.1.</b> Information on toxicological ef         Acute toxicity         Skin corrosion/irritation         Serious eye damage/irritation         Respiratory or skin sensitisation         Germ cell mutagenicity         Carcinogenicity         Reproductive toxicity	fects  : Not classified  : Causes severe skin burns and eye damage.  : Serious eye damage, category 1, implicit  Not classified  : Not classified  : Not classified  : Not classified
<b>11.1.</b> Information on toxicological ef         Acute toxicity         Skin corrosion/irritation         Serious eye damage/irritation         Respiratory or skin sensitisation         Germ cell mutagenicity         Carcinogenicity         Reproductive toxicity         STOT-single exposure	fects  : Not classified  : Causes severe skin burns and eye damage.  : Serious eye damage, category 1, implicit  Not classified  : Not classified  : Not classified  : Not classified
<b>11.1.</b> Information on toxicological ef         Acute toxicity         Skin corrosion/irritation         Serious eye damage/irritation         Respiratory or skin sensitisation         Germ cell mutagenicity         Carcinogenicity         Reproductive toxicity	<ul> <li>fects <ul> <li>Not classified</li> </ul> </li> <li>Causes severe skin burns and eye damage.</li> <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>Not classified</li> <li>May cause respiratory irritation.</li> </ul>
<b>11.1.</b> Information on toxicological ef         Acute toxicity         Skin corrosion/irritation         Serious eye damage/irritation         Respiratory or skin sensitisation         Germ cell mutagenicity         Carcinogenicity         Reproductive toxicity         STOT-single exposure         STOT-repeated exposure	<ul> <li>fects <ul> <li>Not classified</li> </ul> </li> <li>Causes severe skin burns and eye damage.</li> <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> <li>Not classified</li> </ul>
<b>11.1.</b> Information on toxicological ef         Acute toxicity         Skin corrosion/irritation         Serious eye damage/irritation         Respiratory or skin sensitisation         Germ cell mutagenicity         Carcinogenicity         Reproductive toxicity         STOT-single exposure	<ul> <li>fects <ul> <li>Not classified</li> </ul> </li> <li>Causes severe skin burns and eye damage.</li> <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>Not classified</li> <li>May cause respiratory irritation.</li> </ul>

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

12.1. Toxicity

No additional information available

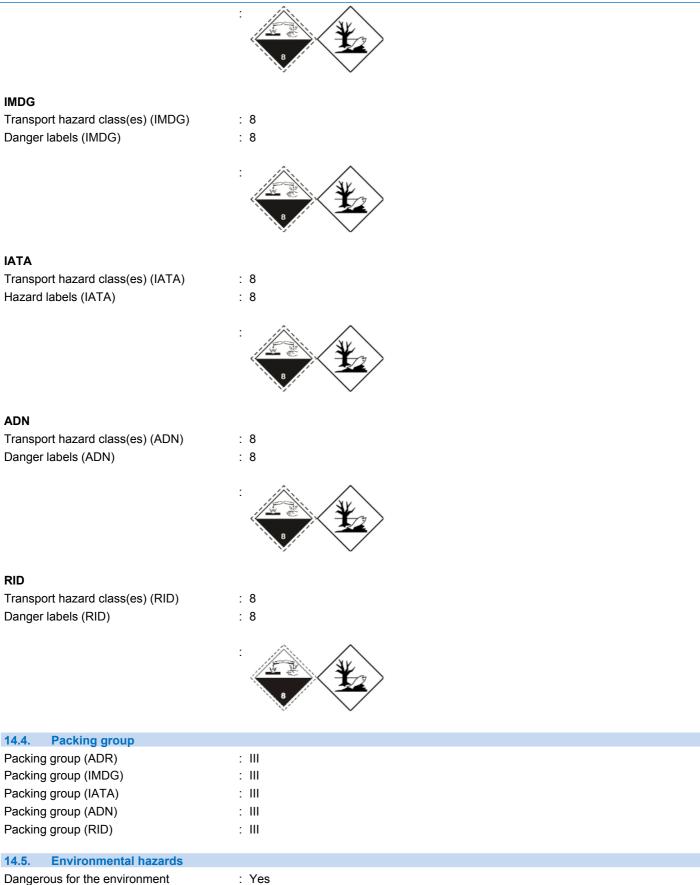
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12.2. Persistence and degradability	
No additional information available	
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assess	ment
No 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	A / ADN
14.1. UN number	
UN-No. (ADR)	: 2672
UN-No. (IMDG)	: 2672
UN-No. (IATA)	: 2672
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 (ADN)	: UN 2672 AMMONIA SOLUTION, 8, III, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID)	: UN 2672 AMMONIA SOLUTION, 8, III, ENVIRONMENTALLY HAZARDOUS
- · · · · ·	
14.3. Transport hazard class(es)	
ADR	
Transport hazard class(es) (ADR)	: 8
Danger labels (ADR)	: 8

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Marine pollutant	: Yes
Other information	: No supplementary information available

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#### 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	80 2672
Tunnel restriction code (ADR)	: E
EAC code	: 2R
- Transport by sea	
Packing instructions (IMDG)	: P001, LP01
IBC packing instructions (IMDG)	: IBC03
IBC special provisions (IMDG)	: B11
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP2
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW2, SW5
Segregation (IMDG)	: SG35
Properties and observations (IMDG)	: Colourless liquid with a pungent odour.Corrosive to copper, nickel, zinc and tin a 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.
MFAG-No	: 154
- Air transport	
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y841
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 852
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 856
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A64, A803
ERG code (IATA)	: 8L
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••••		
<ul> <li>Inland waterway transport</li> </ul>		
Classification code (ADN)	:	C5
Special provisions (ADN)	:	543
Limited quantities (ADN)	:	5 L
Excepted quantities (ADN)	:	E1
Carriage permitted (ADN)	:	Т
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 instructions (RID)	:	Τ7
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. BImSchV (Hazardous Incident Ordinance)

#### Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

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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
<b>Denmark</b> Recommendations Danish Regulation	: Young people below the age of 18 years are not allowed to use the product

15.2.	Chemical	safety	assessment
No add	itional inform	nation a	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. 1A	Skin corrosion/irritation, Category 1A	
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