### MAGNESIUM (MG) ICP STANDARD SOLUTION 1 GM/L IN DILUTE HNO3 TRACEABLE TO NIST MSDS

### CAS No: MSDS



### MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identificatio	on of the substance/mixture and of the company/undertaking
1.1. Product identifie	
Product form	: Mixture
	:
Product code	: I135N
1.2. Relevant identif	ied uses of the substance or mixture and uses advised against
1.2.1. Relevant identif	ïed uses
Use of the substance/mixt	ture : Laboratory chemicals, Manufacture of substances
1.2.2. Uses advised ag	-
No additional information	available
1.3. Details of the su	upplier of the safety data sheet
LOBA CHEMIE PVT.LTD.	
107 Wode House Road, J	ehangir Villa, Colaba
400005 Mumbai - INDIA T +91 22 6663 6663 - F +9	01 22 6663 6600
info@lobachemie.com - w	
1.4. Emergency tele	phone number
Emergency number	: + 91 22 6663 6663 (9:00am - 6:00 pm)
SECTION 2: Hazards ide	
SECTION 2: Hazards lde	
2.1. Classification of	f the substance or mixture
Classification according	g to Regulation (EC) No. 1272/2008 [CLP]
Oxidising Liquids,	H272
Category 2	
Skin corrosion/irritation,	H315
Category 2 Serious eye damage/eye	H319
irritation, Category 2	
Full toxt of clossification of	stageries and LI statements : ass section 16

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

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

No additional information available

Safety Data Sheet

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Easening according to Regulation (EO) i	
Hazard pictograms (CLP)	
	GHS03 GHS07
Signal word (CLP)	: Danger
Hazard statements (CLP)	: H272 - May intensify fire; oxidiser H315 - Causes skin irritation H319 - Causes serious eye irritation
Precautionary statements (CLP)	<ul> <li>P220 - Keep/Store away from clothing//combustible materials</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> </ul>

#### 2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients				
3.1.	Substance			
Not applicable				

#### 3.2. Mixture

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
MAGNESIUM NITRATE AR (HEXAHYDRATE) 99%	(CAS No) 13446-18-9	1 - 5	Not classified
Nitric acid	(CAS No) 7697-37-2 (EC no) 231-714-2 (EC index no) 007-004-00-1	1 - 5	Ox. Liq. 1, H271 Skin Corr. 1A, H314

Full text of H-phrases: see section 16

SECTI	ON 4: First aid measures	
4.1.	Description of first aid measures	S
First-ai	d 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.

Safety Data Sheet

First-aid	I measures after skin contact	: Wash with plenty of soap and water. Wash contaminated clothing before reuse. Get medical advice/attention.
First-aid	I 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	I measures after ingestion	: Rinse mouth. Do not induce vomiting. Get medical advice/attention.
4.2.	Most important symptoms and e	effects, both acute and delayed
Sympto	ms/injuries after skin contact	: Causes skin irritation.
• •	ms/injuries after eye contact	: Causes serious eye irritation.
4.3.	Indication of any immediate med	dical attention and special treatment needed
	tional information available	
SECTIO	ON 5: Firefighting measures	
5.1.	Extinguishing media	
	e extinguishing media	: Carbon dioxide. Dry powder. Foam. Water spray.
Unsulta	ble extinguishing media	: Do not use a heavy water stream.
5.2.	Special hazards arising from the	
Fire haz	zard	: May intensify fire; oxidiser.
5.3.	Advice for firefighters	
Protecti	on during firefighting	: Do not enter fire area without proper protective equipment, including respiratory
		protection.
SECTIO	ON 6: Accidental release measure	S
6.1.	Personal precautions, protective	e equipment and emergency procedures
		e equipment and emergency procedures
6.1.1.	Personal precautions, protective For non-emergency personnel ncy procedures	<ul> <li>equipment and emergency procedures</li> <li>Evacuate unnecessary personnel.</li> </ul>
6.1.1. Emerge	For non-emergency personnel ncy procedures	
6.1.1. Emerge 6.1.2.	For non-emergency personnel ancy procedures For emergency responders	: Evacuate unnecessary personnel.
6.1.1. Emerge 6.1.2.	For non-emergency personnel ncy procedures	
6.1.1. Emerge 6.1.2.	For non-emergency personnel ancy procedures For emergency responders	: Evacuate unnecessary personnel.
6.1.1. Emerge 6.1.2. Protecti 6.2.	For non-emergency personnel ancy procedures For emergency responders ve equipment	: Evacuate unnecessary personnel.
6.1.1. Emerge 6.1.2. Protecti 6.2.	For non-emergency personnel ancy procedures For emergency responders ve equipment Environmental precautions	<ul> <li>Evacuate unnecessary personnel.</li> <li>Use personal protective equipment as required.</li> </ul>
6.1.1. Emerge 6.1.2. Protecti 6.2. Avoid re 6.3.	For non-emergency personnel ancy procedures For emergency responders we equipment Environmental precautions elease to the environment.	<ul> <li>Evacuate unnecessary personnel.</li> <li>Use personal protective equipment as required.</li> </ul>
6.1.1. Emerge 6.1.2. Protecti 6.2. Avoid re 6.3. Method	For non-emergency personnel ancy procedures For emergency responders we equipment Environmental precautions elease to the environment. Methods and material for contains s for cleaning up	<ul> <li>Evacuate unnecessary personnel.</li> <li>Use personal protective equipment as required.</li> </ul>
6.1.1. Emerge 6.1.2. Protecti 6.2. Avoid re 6.3. Method: 6.4.	For non-emergency personnel ancy procedures For emergency responders we equipment Environmental precautions elease to the environment. Methods and material for contail s for cleaning up Reference to other sections	<ul> <li>Evacuate unnecessary personnel.</li> <li>Use personal protective equipment as required.</li> </ul>
6.1.1. Emerge 6.1.2. Protecti 6.2. Avoid re 6.3. Method: 6.4. No addi	For non-emergency personnel ancy procedures For emergency responders we equipment Environmental precautions elease to the environment. Methods and material for contai is for cleaning up Reference to other sections tional information available	<ul> <li>Evacuate unnecessary personnel.</li> <li>Use personal protective equipment as required.</li> </ul>
6.1.1. Emerge 6.1.2. Protecti 6.2. Avoid re 6.3. Method: 6.4. No addi	For non-emergency personnel ancy procedures For emergency responders we equipment Environmental precautions elease to the environment. Methods and material for contail s for cleaning up Reference to other sections	<ul> <li>Evacuate unnecessary personnel.</li> <li>Use personal protective equipment as required.</li> </ul>
6.1.1. Emerge 6.1.2. Protecti 6.2. Avoid re 6.3. Method: 6.4. No addi	For non-emergency personnel ancy procedures For emergency responders we equipment Environmental precautions elease to the environment. Methods and material for contai is for cleaning up Reference to other sections tional information available	<ul> <li>Evacuate unnecessary personnel.</li> <li>Use personal protective equipment as required.</li> </ul>
6.1.1. Emerge 6.1.2. Protecti 6.2. Avoid re 6.3. Method: 6.4. No addi SECTIO	For non-emergency personnel ancy procedures For emergency responders we equipment Environmental precautions elease to the environment. Methods and material for contai is for cleaning up Reference to other sections tional information available DN 7: Handling and storage	<ul> <li>Evacuate unnecessary personnel.</li> <li>Use personal protective equipment as required.</li> </ul>
6.1.1. Emerge 6.1.2. Protecti 6.2. Avoid re 6.3. Method: 6.4. No addi SECTIO 7.1. Precaut	For non-emergency personnel ancy procedures For emergency responders we equipment Environmental precautions elease to the environment. Methods and material for contai s for cleaning up Reference to other sections tional information available DN 7: Handling and storage Precautions for safe handling	<ul> <li>Evacuate unnecessary personnel.</li> <li>Use personal protective equipment as required.</li> </ul> nment and cleaning up <ul> <li>On land, sweep or shovel into suitable containers. Collect spillage.</li> </ul>
6.1.1. Emerge 6.1.2. Protecti 6.2. Avoid re 6.3. Method: 6.4. No addi SECTIO 7.1. Precaut	For non-emergency personnel ancy procedures For emergency responders we equipment Environmental precautions elease to the environment. Methods and material for contail is for cleaning up Reference to other sections tional information available DN 7: Handling and storage Precautions for safe handling ions for safe handling	<ul> <li>Evacuate unnecessary personnel.</li> <li>Use personal protective equipment as required.</li> </ul> <b>nment and cleaning up</b> <ul> <li>On land, sweep or shovel into suitable containers. Collect spillage.</li> </ul> Avoid contact with skin and eyes. Do not breathe vapours. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
6.1.1. Emerge 6.1.2. Protecti 6.2. Avoid re 6.3. Method: 6.4. No addi SECTIO 7.1. Precaut Hygiene 7.2.	For non-emergency personnel ancy procedures For emergency responders we equipment Environmental precautions elease to the environment. Methods and material for contain s for cleaning up Reference to other sections tional information available DN 7: Handling and storage Precautions for safe handling ions for safe handling e measures	<ul> <li>Evacuate unnecessary personnel.</li> <li>Use personal protective equipment as required.</li> </ul> nment and cleaning up <ul> <li>On land, sweep or shovel into suitable containers. Collect spillage.</li> </ul> Avoid contact with skin and eyes. Do not breathe vapours. Avoid contact with skin and eyes. Do not breathe vapours. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
6.1.1. Emerge 6.1.2. Protecti 6.2. Avoid re 6.3. Method: 6.4. No addi SECTIO 7.1. Precaut Hygiene 7.2.	For non-emergency personnel ancy procedures For emergency responders we equipment Environmental precautions elease to the environment. Methods and material for contail s for cleaning up Reference to other sections tional information available DN 7: Handling and storage Precautions for safe handling ions for safe handling e measures Conditions for safe storage, inc	<ul> <li>Evacuate unnecessary personnel.</li> <li>Use personal protective equipment as required.</li> </ul> <b>nment and cleaning up</b> <ul> <li>On land, sweep or shovel into suitable containers. Collect spillage.</li> </ul> Avoid contact with skin and eyes. Do not breathe vapours. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Safety Data Sheet

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	: Wear respiratory protection
SECTION 9: Physical and chemical prop	erties
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

Safety Data Sheet Oxidising properties : No data available Explosive limits : No data available 9.2. **Other information** No additional information available **SECTION 10: Stability and reactivity** 10.1. Reactivity No additional information available **Chemical stability** 10.2. Stable under normal conditions. 10.3. Possibility of hazardous reactions No additional information available 10.4. **Conditions to avoid** Direct sunlight. 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. Serious eye damage/irritation : Causes serious eye irritation. Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified : Not classified Specific target organ toxicity (single exposure) Specific target organ toxicity (repeated : Not classified exposure) : Not classified Aspiration hazard

### Safety Data Sheet

SECTION 12:	Ecologic	al information
SECTION 12.	Ecologic	ar mormation

40.4			
12.1	To	<b>XIC</b>	IŤ

No additional information available

12.2.	Persistence	and	degradability

No additional information available

12.3.	<b>Bioaccumulative</b>	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

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	
UN-No. (ADR)	: 3264
UN-No. (IMDG)	: 3264
UN-No.(IATA)	: 3264
UN-No.(ADN)	: 3264
UN-No. (RID)	: 3264
14.2. UN proper shipping name	
Proper Shipping Name (ADR)	: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Proper Shipping Name (IMDG)	: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Proper Shipping Name (IATA)	: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Proper Shipping Name (ADN)	: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Proper Shipping Name (RID)	: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Transport document description (ADR)	: UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, III, (E)
Transport document description (IMDG)	: UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, III, MARINE POLLUTANT
Transport document description (IATA)	: UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, III
Transport document description (ADN)	: UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, III
Transport document description (RID)	: UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, III

Safety Data Sheet

#### 14.3. Transport hazard class(es)

#### ADR

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



: 8

: 8

: 8

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: 8

: 8

: 8

#### IMDG

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



#### ΙΑΤΑ

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



### ADN

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

#### RID

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



14.4. Packing group	
Packing group (ADR)	: III
Packing group (IMDG)	: 111
Packing group (IATA)	: III
Packing group (ADN)	: III

Safety Data Sheet

14.6.

Special precautions for user

Packing group (RID)	: 111
14.5. Environmental hazards	
Dangerous for the environment	: No
Marine pollutant	: Yes (IMDG only)
Other information	: No supplementary information available

14.6. Special precautions for user	
- Overland transport	
Classification code (ADR)	: C1
Special provision (ADR)	: 274
Limited quantities (ADR)	: 5L
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container	: T7
instructions (ADR)	
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
Orange plates	20
	80
	3264
Tunnel restriction code (ADR)	: E
EAC code	: 2X
APP code	: B
- Transport by sea	
Special provision (IMDG)	: 223, 274
Limited quantities (IMDG)	: 5L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP1, TP28
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW2
MFAG-No	: 154
- Air transport	<b>F</b> 4
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y841
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 852

Safety Data Sheet

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	PCA max net quantity (IATA)	:	5L
	CAO packing instructions (IATA)	:	856
	CAO max net quantity (IATA)	:	60L
	Special provision (IATA)	:	A3
	ERG code (IATA)	:	8L
	- Inland waterway transport		
	Classification code (ADN)		C1
	Special provisions (ADN)		274
	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
	ramber of blue conconging (7,514)	•	0
	- Rail transport		
	Classification code (RID)	:	C1
	Special provision (RID)	:	274
	Limited quantities (RID)	:	5L
	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, TP28
	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 substances with Annex XVII restrictions Contains no REACH candidate substance

Contains no REACH Annex XIV substances.

#### 15.1.2. National regulations

#### Germany

### Safety Data Sheet

AwSV/VwVwS Annex reference	: Water hazard class (WGK) 3, strongly hazardous 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)

15.2. Chemical safety assessment

No additional information available

### SECTION 16: Other information

#### Full text of H- and EUH-phrases:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Ox. Liq. 1	Oxidising Liquids, Category 1
Ox. Liq. 2	Oxidising Liquids, Category 2
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H271	May cause fire or explosion; strong oxidiser
H272	May intensify fire; oxidiser
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H319	Causes serious eye irritation

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