

# Otto Chemie Pvt Ltd

An ISO 9001 : 2015 & GMP Certified Company  
Office : No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road,  
Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)  
Tel : + 91 98200 41841 Email : [info@ottokemi.com](mailto:info@ottokemi.com) Web : [www.ottokemi.com](http://www.ottokemi.com)

## MATERIAL SAFETY DATA SHEET (MSDS)

### SECTION 1: Product identifiers

Product Name : Lead AAS standard solution 1000 mg/L Pb in diluted HNO<sub>3</sub> traceable to NIST  
Product Code : L 0063

1.2. Relevant identified uses of the substance or mixture and uses advised against  
Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet  
Company identification  
OTTO CHEMIE PVT LTD  
No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road,  
Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

1.4. Emergency telephone number  
Phone no. : + 91 98200 41841 (10 : 00 am – 06 : 00 pm)

### SECTION 2: Hazards identification

2.1. Classification of the substance or mixture  
Classification according to Regulation (EC) No. 1272/2008 [CLP] Mixtures/Substances: SDS EU 2015: According to  
Regulation (EU) 2015/830 (REACH Annex II)

Corrosive to metals, Category 1	H290
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Hazardous to the aquatic environment — Chronic Hazard, Category 3	H412

Full text of H statements : 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] Extra labelling to display Extra classification(s) to display

Hazard pictograms (CLP) :

GHS05

Signal word (CLP) : Warning

Hazard statements (CLP) :

H315 -

H319 -

H412 -

H310 -

Precautionary statements (CLP)

face protection.

P305+P351+P338 -

P310 -

2.3. Other hazards

No additional information available

H290 - May be corrosive to metals.

Causes skin irritation.

Causes serious eye irritation.

Harmful to aquatic life with long lasting effects.

Fatal in contact with skin.

: P280 - Wear protective clothing, protective gloves, eye protection,

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor.

### SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

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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
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
LEAD NITRATE AR 99.5% substance listed as REACH Candidate (Lead dinitrate)	(CAS-No.) 10099-74-8	0.01 - 1	Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400

## 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.

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

Symptoms/effects after skin contact : Causes skin irritation. Fatal in contact with skin.

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

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 : 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 : Stop release. Stop leak if safe to do so.

### 6.2. Environmental precautions

Very toxic 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.

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

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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 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	: Colourless.
Odour	: No data available
Odour threshold	: No data available
pH	: 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

### 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. Overheating. Open flame. Heat.

### 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

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:

Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg

Inhalation LC50 Rat: > 50mg/L.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity

to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

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Special Remarks on other Toxic Effects on Humans: Not available.

## 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

Component

LEAD NITRATE AR 99.5% (10099-74-8) This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

### 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

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

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

### 14.3. Transport hazard class(es)

ADR

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

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Transport hazard class(es) (RID) : 8

Danger labels (RID) : 8

14.4. Packing group

Packing group (ADR) : III

Packing group (IMDG) : III

Packing group (IATA) : III

Packing group (ADN) : III

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) : C1

Special provisions (ADR) : 274

Limited quantities (ADR) : 5I

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, 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 :

Tunnel restriction code (ADR) : E

EAC code : 2X

APP code : B

- Transport by sea

Special provisions (IMDG) : 223, 274

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

Properties and observations (IMDG) : Causes 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) : A3, A803

ERG code (IATA) : 8L

- Inland waterway transport

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Classification code (ADN)	: C1
Special provisions (ADN)	: 274
Limited 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)	: C1
Special provisions (RID)	: 274
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	
	: T7
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

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

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  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No additional information available

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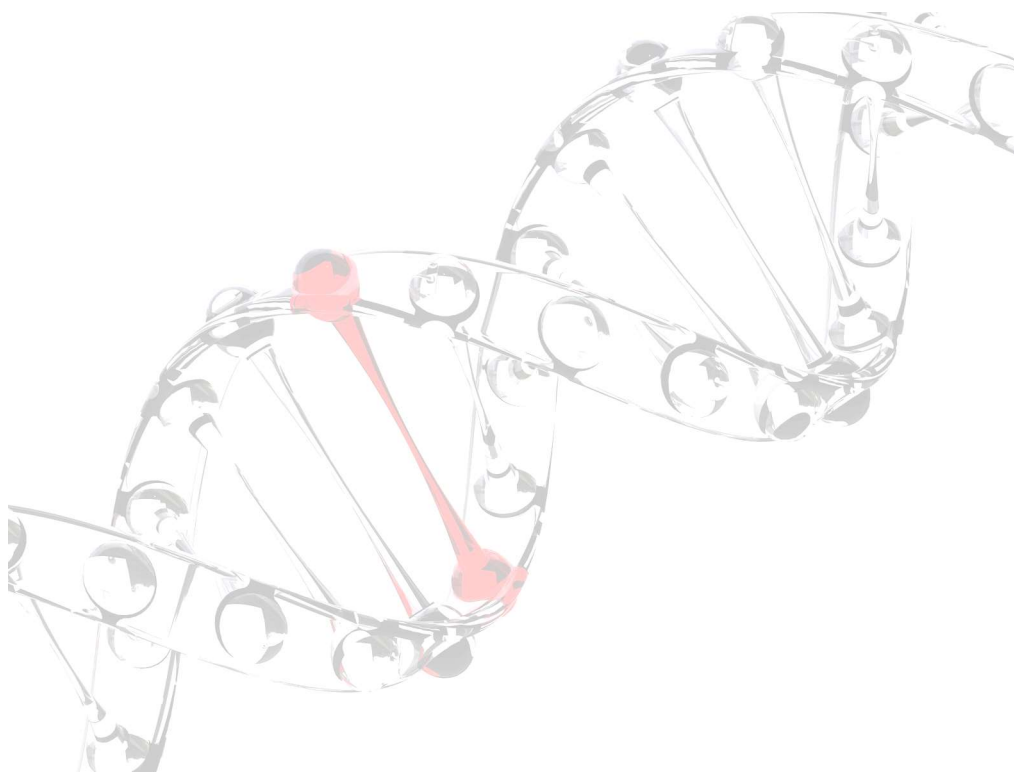
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## SECTION 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.



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