

### 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 : 10099-74-8  
Product code : 04378

##### 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](mailto:info@lobachemie.com) - [www.lobachemie.com](http://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]

|                                                                   |      |
|-------------------------------------------------------------------|------|
| Oxidising Solids, Category 2                                      | H272 |
| Acute toxicity (oral), Category 4                                 | H302 |
| Acute toxicity (inhal.), Category 4                               | H332 |
| Reproductive toxicity, Category 1A                                | H360 |
| Specific target organ toxicity — Repeated exposure, Category 2    | H373 |
| Hazardous to the aquatic environment — Chronic Hazard, Category 1 | H410 |

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

# LEAD NITRATE AR/ACS

## Safety Data Sheet

### Classification according to Directive 67/548/EEC or 1999/45/EC

Repr.Cat.1; R61

Repr.Cat.3; R62

O; R8

Xn; R20/22

Xi; R41

N; R50/53

R33

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) :



GHS03



GHS07



GHS08



GHS09

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H272 - May intensify fire; oxidiser  
H302+H332 - Harmful if swallowed or if inhaled  
H360 - May damage fertility or the unborn child  
H373 - May cause damage to organs through prolonged or repeated exposure  
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP) :

P201 - Obtain special instructions before use  
P220 - Keep/Store away from clothing/.../combustible materials  
P273 - Avoid release to the environment  
P308+P313 - IF exposed or concerned: Get medical advice/attention  
P501 - Dispose of contents/container to ...

## 2.3. Other hazards

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

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Name : LEAD NITRATE AR/ACS

CAS No : 10099-74-8

Full text of R- and H-phrases: see section 16

### 3.2. Mixture

Not applicable

# LEAD NITRATE AR/ACS

## Safety Data Sheet

### 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. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.
- First-aid measures after skin contact : Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

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

- Symptoms/injuries : May damage the unborn child. Suspected of damaging fertility. Causes damage to organs through prolonged or repeated exposure.
- Symptoms/injuries after inhalation : Harmful if inhaled.
- Symptoms/injuries after ingestion : Harmful if swallowed.

#### 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 : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>).
- Unsuitable extinguishing media : Do not use extinguishing media containing water.

#### 5.2. Special hazards arising from the substance or mixture

- Explosion hazard : Heating may cause a fire or explosion.

#### 5.3. Advice for firefighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment.

### 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.

#### 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 : Clear up rapidly by scoop or vacuum.

#### 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.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash ... thoroughly after handling.

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### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. 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 : Wear appropriate mask

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Solid  
Colour : White crystalline.  
Odour : odourless.  
Odour threshold : No data available  
pH : 3 - 4  
Relative evaporation rate (butylacetate=1) : No data available  
Melting point : 205 °C  
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 : 11  
Relative density : No data available  
Density : 4.53 g/cm<sup>3</sup>  
Solubility : Water: 50 (gm in 100 gm of water)

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|                      |                                                                               |
|----------------------|-------------------------------------------------------------------------------|
| Log Pow              | : No data available                                                           |
| Viscosity, kinematic | : No data available                                                           |
| Viscosity, dynamic   | : No data available                                                           |
| Explosive properties | : No data available                                                           |
| Oxidising properties | : The substance or mixture is classified as oxidizing with the subcategory 2. |
| 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

May intensify fire; oxidiser.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Direct sunlight. Air contact. Moisture.

### 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 : Oral: Harmful if swallowed. Inhalation: Harmful if inhaled.

Skin corrosion/irritation : Not classified

pH: 3 - 4

Serious eye damage/irritation : Not classified

pH: 3 - 4

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : May damage fertility or the unborn child.

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : May cause damage to organs through prolonged or repeated exposure.

Additional information : There are potential chronic health effects to consider

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Aspiration hazard : Not classified

Potential adverse human health effects and symptoms : Harmful if swallowed.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - water : Very toxic to aquatic life.

#### 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

##### LEAD NITRATE AR/ACS (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

Product/Packaging disposal recommendations : Dispose of contents/container to ...

### SECTION 14: Transport information

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

#### 14.1. UN number

UN-No. (ADR) : 1469

UN-No. (IMDG) : 1469

UN-No.(IATA) : 1469

UN-No.(ADN) : 1469

UN-No. (RID) : 1469

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : LEAD NITRATE

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|                                       |                                                                                   |
|---------------------------------------|-----------------------------------------------------------------------------------|
| Proper Shipping Name (IMDG)           | : LEAD NITRATE                                                                    |
| Proper Shipping Name (IATA)           | : LEAD NITRATE                                                                    |
| Proper Shipping Name (ADN)            | : LEAD NITRATE                                                                    |
| Proper Shipping Name (RID)            | : LEAD NITRATE                                                                    |
| Transport document description (ADR)  | : UN 1469 LEAD NITRATE, 5.1 (6.1), II, (E), ENVIRONMENTALLY HAZARDOUS             |
| Transport document description (IMDG) | : UN 1469 LEAD NITRATE, 5.1 (6.1), II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS |
| Transport document description (IATA) | : UN 1469 LEAD NITRATE, 5.1, II, ENVIRONMENTALLY HAZARDOUS                        |
| Transport document description (ADN)  | : UN 1469 LEAD NITRATE, 5.1 (6.1), II, ENVIRONMENTALLY HAZARDOUS                  |
| Transport document description (RID)  | : UN 1469 LEAD NITRATE, 5.1 (6.1), II, ENVIRONMENTALLY HAZARDOUS                  |

### 14.3. Transport hazard class(es)

#### ADR

|                                  |             |
|----------------------------------|-------------|
| Transport hazard class(es) (ADR) | : 5.1 (6.1) |
| Danger labels (ADR)              | : 5.1, 6.1  |



#### IMDG

|                                   |             |
|-----------------------------------|-------------|
| Transport hazard class(es) (IMDG) | : 5.1 (6.1) |
| Danger labels (IMDG)              | : 5.1, 6.1  |



#### IATA

|                                   |             |
|-----------------------------------|-------------|
| Transport hazard class(es) (IATA) | : 5.1 (6.1) |
| Hazard labels (IATA)              | : 5.1, 6.1  |



#### ADN

|                                  |             |
|----------------------------------|-------------|
| Transport hazard class(es) (ADN) | : 5.1 (6.1) |
| Danger labels (ADN)              | : 5.1, 6.1  |



#### RID

|                                  |             |
|----------------------------------|-------------|
| Transport hazard class(es) (RID) | : 5.1 (6.1) |
| Danger labels (RID)              | : 5.1, 6.1  |

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### 14.4. Packing group


|                      |      |
|----------------------|------|
| Packing group (ADR)  | : II |
| Packing group (IMDG) | : II |
| Packing group (IATA) | : II |
| Packing group (ADN)  | : II |
| Packing group (RID)  | : II |

### 14.5. Environmental hazards

|                               |                                          |
|-------------------------------|------------------------------------------|
| Dangerous for the environment | : Yes                                    |
| Marine pollutant              | : Yes                                    |
| Other information             | : No supplementary information available |

### 14.6. Special precautions for user

#### - Overland transport

|                                                                         |                                                                                       |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Classification code (ADR)                                               | : OT2                                                                                 |
| Limited quantities (ADR)                                                | : 1kg                                                                                 |
| Excepted quantities (ADR)                                               | : E2                                                                                  |
| Packing instructions (ADR)                                              | : P002, IBC08                                                                         |
| Special packing provisions (ADR)                                        | : B4                                                                                  |
| Mixed packing provisions (ADR)                                          | : MP2                                                                                 |
| Portable tank and bulk container instructions (ADR)                     | : T3                                                                                  |
| Portable tank and bulk container special provisions (ADR)               | : TP33                                                                                |
| Tank code (ADR)                                                         | : SGAN                                                                                |
| Tank special provisions (ADR)                                           | : TU3                                                                                 |
| Vehicle for tank carriage                                               | : AT                                                                                  |
| Transport category (ADR)                                                | : 2                                                                                   |
| Special provisions for carriage - Packages (ADR)                        | : V11                                                                                 |
| Special provisions for carriage - Loading, unloading and handling (ADR) | : CV24, CV28                                                                          |
| Hazard identification number (Kemler No.)                               | : 56                                                                                  |
| Orange plates                                                           | :  |
| Tunnel restriction code (ADR)                                           | : E                                                                                   |
| EAC code                                                                | : 1Y                                                                                  |

#### - Transport by sea

|                                 |           |
|---------------------------------|-----------|
| Limited quantities (IMDG)       | : 1 kg    |
| Excepted quantities (IMDG)      | : E2      |
| Packing instructions (IMDG)     | : P002    |
| IBC packing instructions (IMDG) | : IBC08   |
| IBC special provisions (IMDG)   | : B2, B4  |
| Tank instructions (IMDG)        | : T3, BK2 |
| Tank special provisions (IMDG)  | : TP33    |
| EmS-No. (Fire)                  | : F-A     |



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EmS-No. (Spillage) : S-Q  
Stowage category (IMDG) : A  
MFAG-No : 141

### - Air transport

PCA Excepted quantities (IATA) : E2  
PCA Limited quantities (IATA) : Y543  
PCA limited quantity max net quantity (IATA) : 1kg  
PCA packing instructions (IATA) : 558  
PCA max net quantity (IATA) : 5kg  
CAO packing instructions (IATA) : 562  
CAO max net quantity (IATA) : 25kg  
ERG code (IATA) : 5P

### - Inland waterway transport

Classification code (ADN) : OT2  
Special provisions (ADN) : 802  
Limited quantities (ADN) : 1 kg  
Excepted quantities (ADN) : E2  
Equipment required (ADN) : PP, EP  
Number of blue cones/lights (ADN) : 2

### - Rail transport

Classification code (RID) : OT2  
Limited quantities (RID) : 1kg  
Excepted quantities (RID) : E2  
Packing instructions (RID) : P002, IBC08  
Special packing provisions (RID) : B4  
Mixed packing provisions (RID) : MP2  
Portable tank and bulk container instructions (RID) : T3  
Portable tank and bulk container special provisions (RID) : TP33  
Tank codes for RID tanks (RID) : SGAN  
Special provisions for RID tanks (RID) : TU3  
Transport category (RID) : 2  
Special provisions for carriage – Packages (RID) : W11  
Special provisions for carriage – Loading and unloading (RID) : CW24, CW28  
Colis express (express parcels) (RID) : CE10  
Hazard identification number (RID) : 56

### 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  
Lead dinitrate is on the REACH Candidate List  
LEAD NITRATE AR/ACS is not on the REACH Annex XIV List

# LEAD NITRATE AR/ACS

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### 15.1.2. National regulations

#### Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 3, strongly hazardous to water (KBwS-Beschluss; WGK No 313)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

#### 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  
The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

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

|                           |                                                                                                 |
|---------------------------|-------------------------------------------------------------------------------------------------|
| Acute Tox. 4 (Inhalation) | Acute toxicity (inhal.), Category 4                                                             |
| Acute Tox. 4 (Oral)       | Acute toxicity (oral), Category 4                                                               |
| Aquatic Chronic 1         | Hazardous to the aquatic environment — Chronic Hazard, Category 1                               |
| Ox. Sol. 2                | Oxidising Solids, Category 2                                                                    |
| Repr. 1A                  | Reproductive toxicity, Category 1A                                                              |
| STOT RE 2                 | Specific target organ toxicity — Repeated exposure, Category 2                                  |
| H272                      | May intensify fire; oxidiser                                                                    |
| H302                      | Harmful if swallowed                                                                            |
| H332                      | Harmful if inhaled                                                                              |
| H360                      | May damage fertility or the unborn child                                                        |
| H373                      | May cause damage to organs through prolonged or repeated exposure                               |
| H410                      | Very toxic to aquatic life with long lasting effects                                            |
| R20/22                    | Harmful by inhalation and if swallowed                                                          |
| R33                       | Danger of cumulative effects                                                                    |
| R41                       | Risk of serious damage to eyes                                                                  |
| R50/53                    | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment |
| R61                       | May cause harm to the unborn child                                                              |
| R62                       | Possible risk of impaired fertility                                                             |
| R8                        | Contact with combustible material may cause fire                                                |
| N                         | Dangerous for the environment                                                                   |

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|    |           |
|----|-----------|
| O  | Oxidising |
| Xi | Irritant  |
| Xn | Harmful   |

*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*