

# MERCURIC (MERCURIC)(II) NITRATE 0.05M (0.1N) STANDARDIZED SOLUTION MSDS



LABORATORY REAGENTS  
& FINE CHEMICALS

CAS-No.: MSDS

## MATERIAL SAFETY DATA SHEET (MSDS)

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
:  
Product code : R190C

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial  
For professional use only  
Use of the substance/mixture : Laboratory chemicals

##### 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 Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

T; R23/24/25  
R52/53  
R33

Full text of R-phrases: 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 Directive 67/548/EEC or 1999/45/EC

Hazard symbols



T - Toxic

R-phrases

: R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed  
R33 - Danger of cumulative effects  
R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S-phrases

: S4 - Keep away from living quarters  
S24 - Avoid contact with skin  
S28 - After contact with skin, wash immediately with plenty of ... (to be specified by the manufacturer)  
S35 - This material and its container must be disposed of in a safe way  
S36/37 - Wear suitable protective clothing and gloves  
S38 - In case of insufficient ventilation, wear suitable respiratory equipment  
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)  
S59 - Refer to manufacturer/supplier for information on recovery/recycling  
S61 - Avoid release to the environment. Refer to special instructions/safety data sheets

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name                            | Product identifier                        | %       | Classification according to Directive 67/548/EEC | Classification according to Regulation (EC) No. 1272/2008 [CLP]   |
|---------------------------------|---|---------|--|---|
| Water                           | (CAS-No.) 7732-18-5<br>(EC-No.) 231-791-2 | 75 - 99 | Not classified                                   | Not classified  |
| MERCURIC NITRATE EXTRA PURE 98% | (CAS-No.) 7783-34-8                       | 1 - 5   | T+; R26/27/28<br>N; R50/53<br>R33                | Acute Tox. 1 (Dermal), H310<br>Acute Tox. 2 (Inhalation), H330<br>Acute Tox. 1 (Oral), H300<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 |

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

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### 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 out with water. If you feel unwell, seek medical advice.

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

- Symptoms/effects after inhalation : Harmful if inhaled.
- Symptoms/effects after skin contact : Toxic in contact with skin.
- Symptoms/effects 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

No additional information available

#### 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

Harmful to aquatic life with long lasting effects.

#### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Clean contaminated surfaces with an excess of water.

#### 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 : Do not get in eyes, on skin, or on clothing.
- Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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

Storage conditions : Store in original container. Store in a well-ventilated place. Keep cool.

### 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 respiratory protection.

## SECTION 9: Physical and chemical properties

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

Physical state : Liquid  
Molecular mass : 324.6 g/mol  
Colour : Clear Colorless.  
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  
Density : 1.005 g/cm<sup>3</sup>

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|                      |                     |
|----------------------|---------------------|
| 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

Air contact. 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            | : Toxic by inhalation, in contact with skin and if swallowed. |
| Irritation                | : Not classified  |
| Corrosivity               | : Not classified  |
| Sensitisation             | : Not classified  |
| Repeated dose toxicity    | : Not classified  |
| Carcinogenicity           | : Not classified  |
| Mutagenicity              | : Not classified  |
| Toxicity for reproduction | : Not classified  |

## 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 assessment

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 / ADN

### 14.1. UN number

|               |        |
|---------------|--------|
| UN-No. (ADR)  | : 3289 |
| UN-No. (IMDG) | : 3289 |
| UN-No. (IATA) | : 3289 |
| UN-No. (ADN)  | : 3289 |
| UN-No. (RID)  | : 3289 |

### 14.2. UN proper shipping name

|                                       |  |
|---------------------------------------|--|
| Proper Shipping Name (ADR)            | : TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S.                             |
| Proper Shipping Name (IMDG)           | : TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S.                             |
| Proper Shipping Name (IATA)           | : Toxic liquid, corrosive, inorganic, n.o.s.                             |
| Proper Shipping Name (ADN)            | : TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S.                             |
| Proper Shipping Name (RID)            | : TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S.                             |
| Transport document description (ADR)  | : UN 3289 TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S., 6.1 (8), II, (D/E) |
| Transport document description (IMDG) | : UN 3289 TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S., 6.1 (8), II        |
| Transport document description (IATA) | : UN 3289 Toxic liquid, corrosive, inorganic, n.o.s., 6.1, II            |
| Transport document description (ADN)  | : UN 3289 TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S., 6.1 (8), II        |
| Transport document description (RID)  | : UN 3289 TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S., 6.1 (8), II        |

### 14.3. Transport hazard class(es)

#### ADR

|                                  |           |
|----------------------------------|-----------|
| Transport hazard class(es) (ADR) | : 6.1 (8) |
|----------------------------------|-----------|

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Danger labels (ADR) : 6.1, 8



### IMDG

Transport hazard class(es) (IMDG) : 6.1 (8)

Danger labels (IMDG) : 6.1, 8



### IATA

Transport hazard class(es) (IATA) : 6.1 (8)

Hazard labels (IATA) : 6.1, 8



### ADN

Transport hazard class(es) (ADN) : 6.1 (8)

Danger labels (ADN) : 6.1, 8



### RID

Transport hazard class(es) (RID) : 6.1 (8)

Danger labels (RID) : 6.1, 8



### 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 : No

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Marine pollutant : No  
Other information : No supplementary information available

### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR) : TC3  
Special provisions (ADR) : 274  
Limited quantities (ADR) : 100ml  
Excepted quantities (ADR) : E4  
Packing instructions (ADR) : P001, IBC02  
Mixed packing provisions (ADR) : MP15  
Portable tank and bulk container instructions (ADR) : T11  
Portable tank and bulk container special provisions (ADR) : TP2, TP27  
Tank code (ADR) : L4BH  
Tank special provisions (ADR) : TU15, TE19  
Vehicle for tank carriage : AT  
Transport category (ADR) : 2  
Special provisions for carriage - Loading, unloading and handling (ADR) : CV13, CV28  
Special provisions for carriage - Operation (ADR) : S9, S19  
Hazard identification number (Kemler No.) : 68  
Orange plates :



Tunnel restriction code (ADR) : D/E  
EAC code : 2X  
APP code : B

#### - Transport by sea

Special provisions (IMDG) : 274  
Packing instructions (IMDG) : P001  
IBC packing instructions (IMDG) : IBC02  
Tank instructions (IMDG) : T11  
Tank special provisions (IMDG) : TP2, TP27  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-B  
Stowage category (IMDG) : B  
Stowage and handling (IMDG) : SW2  
Properties and observations (IMDG) : Toxic if swallowed, by skin contact or by inhalation. Causes burns to skin, eyes and mucous membranes.  
MFAG-No : 154

#### - Air transport

PCA Excepted quantities (IATA) : E4  
PCA Limited quantities (IATA) : Y640  
PCA limited quantity max net quantity (IATA) : 0.5L  
PCA packing instructions (IATA) : 653  
PCA max net quantity (IATA) : 1L



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CAO packing instructions (IATA) : 660  
CAO max net quantity (IATA) : 30L  
Special provisions (IATA) : A4, A137  
ERG code (IATA) : 6C

### - Inland waterway transport

Classification code (ADN) : TC3  
Special provisions (ADN) : 274, 802  
Limited quantities (ADN) : 100 ml  
Excepted quantities (ADN) : E4  
Carriage permitted (ADN) : T  
Equipment required (ADN) : PP, EP, TOX, A  
Ventilation (ADN) : VE02  
Number of blue cones/lights (ADN) : 2

### - Rail transport

Classification code (RID) : TC3  
Special provisions (RID) : 274  
Excepted quantities (RID) : E4  
Packing instructions (RID) : P001, IBC02  
Mixed packing provisions (RID) : MP15  
Portable tank and bulk container instructions (RID) : T11  
Portable tank and bulk container special provisions (RID) : TP2, TP27  
Tank codes for RID tanks (RID) : L4BH  
Special provisions for RID tanks (RID) : TU15  
Transport category (RID) : 2  
Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW28, CW31  
Colis express (express parcels) (RID) : CE5  
Hazard identification number (RID) : 68

### 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

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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

## SECTION 16: Other information

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

|                           |   |
|---------------------------|---|
| Acute Tox. 1 (Dermal)     | Acute toxicity (dermal), Category 1   |
| Acute Tox. 1 (Oral)       | Acute toxicity (oral), Category 1   |
| Acute Tox. 2 (Inhalation) | Acute toxicity (inhal.), Category 2   |
| Aquatic Acute 1           | Hazardous to the aquatic environment — Acute Hazard, Category 1                                 |
| Aquatic Chronic 1         | Hazardous to the aquatic environment — Chronic Hazard, Category 1                               |
| H300                      | Fatal if swallowed.   |
| H310                      | Fatal in contact with skin.   |
| H330                      | Fatal if inhaled.   |
| H400                      | Very toxic to aquatic life.   |
| H410                      | Very toxic to aquatic life with long lasting effects.   |
| R23/24/25                 | Toxic by inhalation, in contact with skin and if swallowed                                      |
| R26/27/28                 | Very toxic by inhalation, in contact with skin and if swallowed                                 |
| R33                       | Danger of cumulative effects  |
| R50/53                    | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment |
| R52/53                    | Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment    |
| N                         | Dangerous for the environment   |
| T                         | Toxic   |
| T+                        | Very toxic  |

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*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*