

CAS No: 7440-43-9 MSDS

MATERIAL SAFETY DATA SHEET (MSDS)

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

1.1. Product identifier

Product form : Substance
:
EC index no : 048-002-00-0
EC no : 231-152-8
CAS No : 7440-43-9
Product code : 02410

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 - 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]

Acute toxicity (inhal.), Category 2 H330
Germ cell mutagenicity, Category 2 H341
Carcinogenicity, Category 1B H350
Reproductive toxicity, Category 2 H361fd
Specific target organ toxicity — Repeated exposure, Category 1 H372
Hazardous to the aquatic environment — Chronic Hazard, Category 1 H410

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

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

Carc.Cat.2; R45

Muta.Cat.3; R68

Repr.Cat.3; R62

Repr.Cat.3; R63

T+; R26

T; R48/23/25

N; R50/53

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)



GHS06

GHS08

GHS09

Signal word (CLP)

: Danger

Hazard statements (CLP)

: H330 - Fatal if inhaled
H341 - Suspected of causing genetic defects
H350 - May cause cancer
H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child
H372 - Causes 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
P260 - Do not breathe vapours, dust, gas, fume
P273 - Avoid release to the environment
P281 - Use personal protective equipment as required
P284 - [In case of inadequate ventilation] wear respiratory protection
P310 - Immediately call a POISON CENTER or doctor/physician

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

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

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact	: Gently wash with plenty of soap and water. Get immediate 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.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting.

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

Symptoms/injuries	: Suspected of causing genetic defects. May cause cancer. Suspected of damaging fertility. May cause damage to organs. Causes damage to organs through prolonged or repeated exposure.
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4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Carbon dioxide. Dry powder. Foam. Water spray.
Unsuitable extinguishing media	: Do not use a heavy water stream.

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.
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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.
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6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers.
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6.4. Reference to other sections

No additional information available

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with skin and eyes. Do not breathe vapours.
- Hygiene measures : Do not eat, drink or smoke when using this product. 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

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 : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Solid
- Colour : Silver gray granules.
- Odour : odourless.
- Odour threshold : No data available
- pH : No data available
- Relative evaporation rate (butylacetate=1) : No data available
- Melting point : 320.9 °C
- Freezing point : No data available
- Boiling point : 765 °C
- Flash point : No data available
- Auto-ignition temperature : No data available
- Decomposition temperature : No data available
- Flammability (solid, gas) : No data available

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Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 8.64 g/cm ³
Solubility	: Water: Insoluble
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. 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 : Inhalation: Fatal if inhaled.

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Suspected of causing genetic defects.

Carcinogenicity : May cause cancer.

Reproductive toxicity : Suspected of damaging fertility. Suspected of damaging the unborn child.

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Specific target organ toxicity (single exposure) : Not classified

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

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

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Persistence and degradability	May cause long-term adverse effects in the environment.
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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

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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) : 2570

UN-No. (IMDG) : 2570

UN-No.(IATA) : 2570

UN-No.(ADN) : 2570

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UN-No. (RID) : 2570

14.2. UN proper shipping name

Proper Shipping Name (ADR) : CADMIUM COMPOUND
Proper Shipping Name (IMDG) : CADMIUM COMPOUND
Proper Shipping Name (IATA) : CADMIUM COMPOUND
Proper Shipping Name (ADN) : CADMIUM COMPOUND
Proper Shipping Name (RID) : CADMIUM COMPOUND
Transport document description (ADR) : UN 2570 CADMIUM COMPOUND, 6.1, I, (C/E), ENVIRONMENTALLY HAZARDOUS
Transport document description (IMDG) : UN 2570 CADMIUM COMPOUND, 6.1, I, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
Transport document description (IATA) : UN 2570 CADMIUM COMPOUND, 6.1, I, ENVIRONMENTALLY HAZARDOUS
Transport document description (ADN) : UN 2570 CADMIUM COMPOUND, 6.1, I, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID) : UN 2570 CADMIUM COMPOUND, 6.1, I, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 6.1
Danger labels (ADR) : 6.1



IMDG

Transport hazard class(es) (IMDG) : 6.1
Danger labels (IMDG) : 6.1



IATA

Transport hazard class(es) (IATA) : 6.1
Hazard labels (IATA) : 6.1



ADN

Transport hazard class(es) (ADN) : 6.1
Danger labels (ADN) : 6.1



RID

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Transport hazard class(es) (RID) : 6.1
Danger labels (RID) : 6.1



14.4. Packing group


Packing group (ADR) : I
Packing group (IMDG) : I
Packing group (IATA) : I
Packing group (ADN) : I
Packing group (RID) : I

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) : T5
Special provision (ADR) : 274, 596
Limited quantities (ADR) : 0
Excepted quantities (ADR) : E5
Packing instructions (ADR) : P002, IBC07
Mixed packing provisions (ADR) : MP18
Portable tank and bulk container instructions (ADR) : T6
Portable tank and bulk container special provisions (ADR) : TP33
Tank code (ADR) : S10AH, L10CH
Tank special provisions (ADR) : TU14, TU15, TE19, TE21
Vehicle for tank carriage : AT
Transport category (ADR) : 1
Special provisions for carriage - Packages (ADR) : V10
Special provisions for carriage - Loading, unloading and handling (ADR) : CV1, CV13, CV28
Special provisions for carriage - Operation (ADR) : S9, S14
Hazard identification number (Kemler No.) : 66
Orange plates : 
Tunnel restriction code (ADR) : C/E
EAC code : 2X

- Transport by sea

Special provision (IMDG) : 274
Limited quantities (IMDG) : 0
Excepted quantities (IMDG) : E5

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Packing instructions (IMDG)	: P002
IBC packing instructions (IMDG)	: IBC07
IBC special provisions (IMDG)	: B1
Tank instructions (IMDG)	: T6
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-A
Stowage category (IMDG)	: A
MFAG-No	: 154

- Air transport

PCA Excepted quantities (IATA)	: E5
PCA Limited quantities (IATA)	: Forbidden
PCA limited quantity max net quantity (IATA)	: Forbidden
PCA packing instructions (IATA)	: 666
PCA max net quantity (IATA)	: 5kg
CAO packing instructions (IATA)	: 673
CAO max net quantity (IATA)	: 50kg
Special provision (IATA)	: A3, A5
ERG code (IATA)	: 6L

- Inland waterway transport

Classification code (ADN)	: T5
Special provisions (ADN)	: 274, 596, 802
Limited quantities (ADN)	: 0
Excepted quantities (ADN)	: E5
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 2

- Rail transport

Classification code (RID)	: T5
Special provision (RID)	: 274, 596
Limited quantities (RID)	: 0
Excepted quantities (RID)	: E5
Packing instructions (RID)	: P002, IBC07
Mixed packing provisions (RID)	: MP18
Portable tank and bulk container instructions (RID)	: T6
Portable tank and bulk container special provisions (RID)	: TP33
Tank codes for RID tanks (RID)	: S10AH, L10CH
Special provisions for RID tanks (RID)	: TU14, TU15, TU38, TE21, TE22
Transport category (RID)	: 1
Special provisions for carriage – Packages (RID)	: W10
Special provisions for carriage – Loading and unloading (RID)	: CW13, CW28, CW31
Hazard identification number (RID)	: 66

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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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

Cadmium is on the REACH Candidate List

CADMIUM (METAL) GRANULAR 99.9% AR is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 3, strongly hazardous to water (KBwS-Beschluss; WGK No 8659)

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. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Carc. 1B	Carcinogenicity, Category 1B
Muta. 2	Germ cell mutagenicity, Category 2
Repr. 2	Reproductive toxicity, Category 2
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
H330	Fatal if inhaled
H341	Suspected of causing genetic defects
H350	May cause cancer
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child
H372	Causes damage to organs through prolonged or repeated exposure

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H410	Very toxic to aquatic life with long lasting effects
R26	Very toxic by inhalation
R45	May cause cancer
R48/23/25	Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R62	Possible risk of impaired fertility
R63	Possible risk of harm to the unborn child
R68	Possible risk of irreversible effects
N	Dangerous for the environment
T	Toxic
T+	Very toxic

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