

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 : 06527

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

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

Carc.Cat.2; R45
Muta.Cat.2; R46
Repr.Cat.2; R60
Repr.Cat.2; R61
T; R25
Xn; R48/21/22
Xi; R36/38
N; R51/53

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



N -
Dangerous
for the
environment

R-phrases :

- R25 - Toxic if swallowed
- R36/38 - Irritating to eyes and skin
- R45 - May cause cancer
- R46 - May cause heritable genetic damage
- R48/21/22 - Harmful: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed
- R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
- R60 - May impair fertility
- R61 - May cause harm to the unborn child

S-phrases :

- S4 - Keep away from living quarters
- S24 - Avoid contact with skin
- S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- 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
- S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection
- 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)
- S53 - Avoid exposure - obtain special instructions before use
- S57 - Use appropriate container to avoid environmental contamination
- S59 - Refer to manufacturer/supplier for information on recovery/recycling
- S60 - This material and its container must be disposed of as hazardous waste
- 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

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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 (EC-No.) 231-791-2	75 - 99	Not classified	Not classified
mercury dichloride; mercuric chloride	(CAS-No.) 7487-94-7 (EC-No.) 231-299-8 (EC Index-No.) 080-010-00-X	5 - 10	Muta.Cat.3; R68 Repr.Cat.3; R62 T+; R28 T; R48/24/25 C; R34 N; R50/53	Acute Tox. 1 (Oral), H300 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT RE 1, H372 Muta. 2, H341 Repr. 2, H361f Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Sodiumsulfate	(CAS-No.) 7757-82-6 (EC-No.) 231-820-9	1 - 5	Not classified	Not classified
Potassium dichromate substance listed as REACH Candidate substance listed in REACH Annex XIV	(CAS-No.) 7778-50-9 (EC-No.) 231-906-6 (EC Index-No.) 024-002-00-6	1 - 5	Carc.Cat.1; R45 Muta.Cat.1; R46 Repr.Cat.1; R60 Repr.Cat.1; R61 O; R8 T+; R26 T; R25 T; R48/23 Xn; R21 R42 C; R34 R43 N; R50/53	Acute Tox. 2 (Inhalation), H330 Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Dermal), H312 Aquatic Acute 1, H400

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

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 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	: Wash with plenty of water/.... Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label).
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Fatal if swallowed. Rinse mouth. Immediately call a POISON CENTER/doctor. Specific treatment (see supplemental first aid instruction on this label).

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

Symptoms/effects	: Causes severe skin burns and eye damage. Causes damage to organs through prolonged or repeated exposure.
Symptoms/effects after skin contact	: Fatal in contact with skin.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: Fatal if swallowed.
Chronic symptoms	: Suspected of damaging fertility.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

No additional information available

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 : Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

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 : Clean up immediately by sweeping 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 : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Eliminate all ignition sources if safe to do so. Avoid breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : 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

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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
Colour	: Orange coloured solution.
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	: 1.056 g/cm ³
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

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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.

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 if swallowed.
Irritation	: Irritating to eyes and skin.
Corrosivity	: Not classified
Sensitisation	: Not classified
Repeated dose toxicity	: Harmful: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed.
Carcinogenicity	: May cause cancer.
Mutagenicity	: May cause heritable genetic damage.
Toxicity for reproduction	: May impair fertility. May cause harm to the unborn child.

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

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : 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

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12.5. Results of PBT and vPvB assessment

Component	
Potassium dichromate (7778-50-9)	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 hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Ecology - waste materials : Hazardous waste due to toxicity.

SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR) : 3287
UN-No. (IMDG) : 3287
UN-No. (IATA) : 3287
UN-No. (ADN) : 3287
UN-No. (RID) : 3287

14.2. UN proper shipping name

Proper Shipping Name (ADR) : TOXIC LIQUID, INORGANIC, N.O.S.
Proper Shipping Name (IMDG) : TOXIC LIQUID, INORGANIC, N.O.S.
Proper Shipping Name (IATA) : Toxic liquid, inorganic, n.o.s.
Proper Shipping Name (ADN) : TOXIC LIQUID, INORGANIC, N.O.S.
Proper Shipping Name (RID) : TOXIC LIQUID, INORGANIC, N.O.S.
Transport document description (ADR) : UN 3287 TOXIC LIQUID, INORGANIC, N.O.S., 6.1, II, (D/E), ENVIRONMENTALLY HAZARDOUS
Transport document description (IMDG) : UN 3287 TOXIC LIQUID, INORGANIC, N.O.S., 6.1, II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
Transport document description (IATA) : UN 3287 Toxic liquid, inorganic, n.o.s., 6.1, II, ENVIRONMENTALLY HAZARDOUS
Transport document description (ADN) : UN 3287 TOXIC LIQUID, INORGANIC, N.O.S., 6.1, II, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID) : UN 3287 TOXIC LIQUID, INORGANIC, N.O.S., 6.1, II, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

ADR

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



IMDG

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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

Transport hazard class(es) (RID) : 6.1

Danger labels (RID) : 6.1



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) : T4

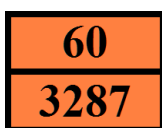
Special provisions (ADR) : 274

Limited quantities (ADR) : 100ml

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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.)	: 60
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-A
Stowage category (IMDG)	: B
Stowage and handling (IMDG)	: SW2
Properties and observations (IMDG)	: Toxic if swallowed, by skin contact or by inhalation.
MFAG-No	: 151

- Air transport

PCA Excepted quantities (IATA)	: E4
PCA Limited quantities (IATA)	: Y641
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 654
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 662
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A3, A4, A137
ERG code (IATA)	: 6L

- Inland waterway transport

Classification code (ADN)	: T4
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

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Ventilation (ADN) : VE02
Number of blue cones/lights (ADN) : 2

- Rail transport

Classification code (RID) : T4
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) : 60

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 a substance on the REACH candidate list in concentration $\geq 0.1\%$ or with a lower specific limit: Potassium dichromate (EC 231-906-6, CAS 7778-50-9)

Contains REACH Annex XIV substances:

Substance name	Authorisation number	Sunset date	REACH authorisation exemptions
Potassium dichromate (EC 231-906-6, CAS 7778-50-9)		21/09/2017	

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 : Potassium dichromate is listed

SZW-lijst van mutagene stoffen : Potassium dichromate is listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : Potassium dichromate is listed

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NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : mercury dichloride; mercuric chloride, Potassium dichromate are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : Potassium dichromate is 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
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-statements:

Acute Tox. 1 (Oral)	Acute toxicity (oral), Category 1
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Muta. 2	Germ cell mutagenicity, Category 2
Repr. 2	Reproductive toxicity, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
H300	Fatal if swallowed.
H301	Toxic if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H341	Suspected of causing genetic defects.
H361f	Suspected of damaging fertility.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
R21	Harmful in contact with skin
R25	Toxic if swallowed
R26	Very toxic by inhalation
R28	Very toxic if swallowed
R34	Causes burns
R36/38	Irritating to eyes and skin
R42	May cause sensitization by inhalation
R43	May cause sensitisation by skin contact

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R45	May cause cancer
R46	May cause heritable genetic damage
R48/21/22	Harmful: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed
R48/23	Toxic: danger of serious damage to health by prolonged exposure through inhalation
R48/24/25	Toxic: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R60	May impair fertility
R61	May cause harm to the unborn child
R62	Possible risk of impaired fertility
R68	Possible risk of irreversible effects
R8	Contact with combustible material may cause fire
C	Corrosive
N	Dangerous for the environment
O	Oxidising
T	Toxic
T+	Very toxic
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