

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 SDS Reference Number: 04596 Issue date: 4/9/2014 Revision date: 9/4/2024 Supersedes version of: 2/23/2018 Version: 1.0

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

1.1. Product identifier

Product form Trade name EC Index-No. EC-No. CAS-No. Product code Type of product Formula Chemical structure Substance
 MERCURY METAL AR
 080-001-00-0
 231-106-7
 7439-97-6
 04596
 Inorganic compound
 Hg

Synonyms

: Hydrargyrum, Quicksilver

Hg

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

Relevant identified uses

Use of the substance/mixture

: Laboratory chemicals Manufacture of substances

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
Reproductive toxicity, Category 1B	H360D
Specific target organ toxicity - Repeated exposure, Category 1	H372
Hazardous to the aquatic environment – Acute Hazard,	H400
Category 1	
Hazardous to the aquatic environment – Chronic Hazard,	H410
Category 1	
Full text of H- and EUH-statements: see section 16	

Adverse physicochemical, human health and environmental effects

May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Fatal if inhaled. Very toxic to aquatic life with long lasting effects.

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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2	2008 [CLP]
Hazard pictograms (CLP)	
	GHS06 GHS08 GHS09
Signal word (CLP)	: Danger
Hazard statements (CLP)	: H330 - Fatal if inhaled.
	H360D - May damage 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 dust/fume/gas/mist/vapours/spray.
	P273 - Avoid release to the environment
	P280 - Wear protective gloves, respiratory protection, protective clothing.
	P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P314 - Get medical advice/attention if you feel unwell.
	P501 - Dispose of contents/container to hazardous or special waste collection point, in
	accordance with local, regional, national and/or international regulation.
2.3 Other hazards	

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients		
3.1. Substances		
Substance type	Mono-constituent	
Name	Product identifier	%
MERCURY METAL	CAS-No.: 7439-97-6 EC-No.: 231-106-7 EC Index-No.: 080-001-00-0	100

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	 Remove person to fresh air and keep comfortable for breathing. Call a physician immediately. Call a doctor.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
First-aid measures for first aider	: First aid workers will be equipped with suitable personal protective equipment.
4.2. Most important symptoms and ef	fects, both acute and delayed
Symptoms/effects	: May damage the unborn child. Causes damage to organs through prolonged or repeated exposure.
Symptoms/effects after inhalation	: Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure. Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact	 None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.
Symptoms/effects after eye contact	: None under normal conditions. Dust from this product may cause eye irritation.
Symptoms/effects after ingestion	: None under normal conditions.

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Chronic symptoms

: May damage fertility or the unborn child.

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 Unsuitable extinguishing media	: Water spray. Dry powder. Foam. : Do not use a heavy water stream.	
5.2. Special hazards arising from the substance or mixture		
Fire hazard Explosion hazard Hazardous decomposition products in case of fire	 No fire hazard. No direct explosion hazard. Toxic fumes may be released. 	
5.3. Advice for firefighters		
Firefighting instructions Protection during firefighting	 Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. 	

SECTION 6: Accidental release measures		
6.1. Personal precautions, protective equipment and emergency procedures		
General measures	: Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.	
For non-emergency personnel		
Protective equipment	: Wear recommended personal protective equipment.	
Emergency procedures	: Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapours/spray.	
For emergency responders		
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".	
Emergency procedures	: Evacuate unnecessary personnel.	

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up	
For containment Methods for cleaning up	 Collect spillage. Mechanically recover the product. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	

For further information refer to section 13.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use.

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U U	 Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product. Wash hands, forearms and face
	thoroughly after handling. Separate working clothes from town clothes. Launder separately. Always wash hands after handling the product.
7.2. Conditions for safe storage, including any incompatibilities	

Technical measures	: Keep in a cool, well-ventilated place away from heat.
Storage conditions	: Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Packaging materials	: Store always product in container of same material as original container.

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

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment. **Personal protective equipment symbol(s):**



Eye and face protection

Eye protection: Chemical goggles or safety glasses

Skin protection

Skin and body protection: Wear a mask

Hand protection: Protective gloves

Respiratory protection

Respiratory protection: Wear appropriate mask

Environmental exposure controls

Environmental exposure controls: Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Colour : Solid : Silver.

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Appearance	: Shiny. opaque. Liquid.
Molecular mass	: 200.59 g/mol
Odour	: Odourless.
Odour threshold	: Not available
Melting point	: -38.87 °C
Freezing point	: Not applicable
Boiling point	: 356.6 °C
Flammability	: Not available
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
рН	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: 1.55 mPa⋅s at 20°C
Solubility	: Water: Immiscible in water
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: < 0.01 hPa at 20°C
Vapour pressure at 50°C	: Not available
Density	: 13.55 g/cm³ at 25 °C
Relative density	: Not available
Relative vapour density at 20°C	: 6.93 (Air = 1)
Particle size	: Not available
9.2. Other information	

Other safety characteristics

Relative evaporation rate (butylacetate=1)

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)

- : Not classified : Not classified
- : Fatal if inhaled.

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Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: May damage the unborn child.
STOT-single exposure	: Not classified
STOT-repeated exposure	: Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
MERCURY METAL AR (7439-97-6)	
Viscosity, kinematic	Not applicable

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general Ecology - water Hazardous to the aquatic environment, short–term (acute) Hazardous to the aquatic environment, long–term (chronic)	 Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.
12.2. Persistence and degradability	
MERCURY METAL AR (7439-97-6)	
Persistence and degradability	Rapidly degradable
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. Endocrine disrupting properties	
No additional information available	
12.7. Other adverse effects	

No additional information available

SECTION 13: Disposal considerations		
13.1. Waste treatment methods		
Regional waste regulation Waste treatment methods Sewage disposal recommendations Product/Packaging disposal recommendations	 Disposal must be done according to official regulations. Dispose of contents/container in accordance with licensed collector's sorting instructions. Disposal must be done according to official regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Disposal must be done according to official regulations. 	

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Additional information

: Do not re-use empty containers.

SECTION 14: Transport information

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

14.1. UN number or ID number

UN-No. (ADR)	: UN 2809
UN-NU. (ADR)	. UN 2009
UN-No. (IMDG)	: UN 2809
UN-No. (IATA)	: UN 2809
UN-No. (ADN)	: UN 2809
UN-No. (RID)	: UN 2809

14.2. UN proper shipping name

Proper Shipping Name (ADR)
Proper Shipping Name (IMDG)
Proper Shipping Name (IATA)
Proper Shipping Name (ADN)
Proper Shipping Name (RID)
Transport document description (ADR)
Transport document description (IMDG)

Transport document description (IATA) Transport document description (ADN) Transport document description (RID)

14.3. Transport hazard class(es)

: UN 2809 Mercury, 8 (6.1), III, ENVIRONMENTALLY HAZARDOUS : UN 2809 MERCURY, 8 (6.1), III, ENVIRONMENTALLY HAZARDOUS : UN 2809 MERCURY, 8 (6.1), III, ENVIRONMENTALLY HAZARDOUS

: UN 2809 MERCURY, 8 (6.1), III, MARINE POLLUTANT/ENVIRONMENTALLY

: UN 2809 MERCURY, 8 (6.1), III, (E)

: MERCURY

Mercury : MERCURY : MERCURY

MERCURY

HAZARDOUS

:

:

ADR

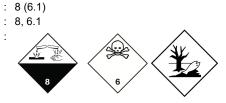
IMDG

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

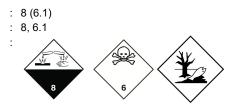
Transport hazard class(es) (IMDG)

Danger labels (IMDG)





: 8 (6.1) : 8, 6.1 •



Danger labels (IATA)

ΙΑΤΑ

ADN

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

Transport hazard class(es) (IATA)

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RID Transport hazard class(es) (RID) Danger labels (RID)	$\begin{array}{c} : 8 (6.1) \\ : 8, 6.1 \\ : \\ : \\ : \\ $
14.4. Packing group	
Packing group (ADR) Packing group (IMDG) Packing group (IATA) Packing group (ADN) Packing group (RID)	: III : III : III : III
14.5. Environmental hazards	
Dangerous for the environment Marine pollutant EmS-No. (Fire) EmS-No. (Spillage) Other information	: Yes : Yes : F-A : S-B : No supplementary information available
14.6. Special precautions for user	
Overland transport Classification code (ADR) Special provisions (ADR) Limited quantities (ADR) Excepted quantities (ADR) Packing instructions (ADR) Mixed packing provisions (ADR) Tank code (ADR) Vehicle for tank carriage Transport category (ADR) Special provisions for carriage - Loading, unloading and handling (ADR) Hazard identification number (Kemler No.) Orange plates	: CT1 : 365 : $5kg$: E0 : P800 : MP15 : L4BN : AT : 3 : CV13, CV28 : 86 :
Tunnel restriction code (ADR)	: E
EAC code	: 2X
Transport by sea Special provisions (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) Stowage category (IMDG) Stowage and handling (IMDG) Segregation (IMDG) Properties and observations (IMDG)	 365 5 kg E0 P800 B SW2 SGG7, SGG11, SG24 A silvery metallic element occurring in the liquid state at normal temperatures. Relative Density: 13.546. Melting point: -39°C. Highly corrosive to aluminium. Toxic if swallowed, by skin contact or by inhalation. Special care should be taken if a leakage occurs during transport, especially when carried in breakable packages and in aluminium freight containers. Carriage should be prohibited in hovercraft and other ships constructed from aluminium.
MFAG-No	: 172

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Air transport PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) Special provisions (IATA) ERG code (IATA)	: : :	E0 Forbidden Forbidden 868 35kg 868 35kg A804 8P
Inland waterway transport Classification code (ADN) Special provisions (ADN) Limited quantities (ADN) Excepted quantities (ADN) Equipment required (ADN) Ventilation (ADN) Number of blue cones/lights (ADN)	:	CT1 365 5 kg E0 PP, EP, EX, TOX, A VE02 0
Rail transportClassification code (RID)Special provisions (RID)Limited quantities (RID)Excepted quantities (RID)Packing instructions (RID)Mixed packing provisions (RID)Tank codes for RID tanks (RID)Transport category (RID)Special provisions for carriage - Loading, unloadingand handling (RID)Colis express (express parcels) (RID)Hazard identification number (RID)		CT1 365 5kg E0 P800 MP15 L4BN 3 CW13, CW28 CE8 86

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	
18.a.	MERCURY METAL AR	
30.	MERCURY METAL AR	

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Listed on the PIC list (Regulation EU 649/2012): mercury

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

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Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

National regulations

France

Occupational diseases				
Code	Description	Description		
RG 2	Occupational diseases caused by mercury and its compounds			
Germany				
· · · · · ·		 WGK 3, Highly hazardous to water (Classification according to AwSV). This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic 		

requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the

Is not subject to the Hazardous Incident Ordinance (12. BImSchV)

Hazardous	Incident	Ordinance	(12.	BImSchV)	

Netherlands

Netherlands		
SZW-lijst van kankerverwekkende stoffen	:	The substance is not listed
SZW-lijst van mutagene stoffen	:	The substance is not listed
SZW-lijst van reprotoxische stoffen – Borstvoeding	:	The substance is not listed
SZW-lijst van reprotoxische stoffen –	:	The substance is not listed
Vruchtbaarheid SZW-lijst van reprotoxische stoffen – Ontwikkeling		MERCURY METAL is listed
SZW-lijst van reprotoxische stonen – Ontwikkeling	·	MENCONT METAL IS listed
Denmark		
Danish National Regulations	:	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

shipping route (according to § 10).

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15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:			
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways		
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road		
ATE	Acute Toxicity Estimate		
BCF	Bioconcentration factor		
BLV	Biological limit value Biochemical oxygen demand (BOD)		
BOD			
COD Chemical oxygen demand (COD)			

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Abbreviations and acronyms:				
DMEL	Derived Minimal Effect level			
DNEL	Derived-No Effect Level			
EC-No.	European Community number			
EC50	Median effective concentration			
EN	European Standard			
IARC	International Agency for Research on Cancer			
ΙΑΤΑ	International Air Transport Association			
IMDG	International Maritime Dangerous Goods			
LC50	Median lethal concentration			
LD50	Median lethal dose			
LOAEL	Lowest Observed Adverse Effect Level			
NOAEC	No-Observed Adverse Effect Concentration			
NOAEL	No-Observed Adverse Effect Level			
NOEC	No-Observed Effect Concentration			
OECD	Organisation for Economic Co-operation and Development			
OEL	Occupational Exposure Limit			
РВТ	Persistent Bioaccumulative Toxic			
PNEC	Predicted No-Effect Concentration			
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail			
SDS	Safety Data Sheet			
STP	Sewage treatment plant			
ThOD	Theoretical oxygen demand (ThOD)			
TLM	Median Tolerance Limit			
VOC	Volatile Organic Compounds			
CAS-No.	Chemical Abstract Service number			
N.O.S.	Not Otherwise Specified			
vPvB	Very Persistent and Very Bioaccumulative			
ED	Endocrine disruptor			

Full text of H- and EUH-statements:	
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
H330	Fatal if inhaled.
H360D	May damage the unborn child.
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.
Repr. 1B	Reproductive toxicity, Category 1B

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Full text of H- and EUH-s	statements:
STOT RE 1 SI	Specific target organ toxicity – Repeated exposure, Category 1

Safety Data Sheet (SDS), EU

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.