

SAFETY DATA SHEET

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

1.1 Product identifiers

Product name Mercury
CAS number 7439-97-6
Synonyms Colloidal mercury; Hydrargyrum; Metallic mercury.

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

Identified uses Laboratory chemicals

1.3 Details of the supplier of the safety data sheet

Company Lab Alley, LLC
 12501 Pauls Valley Road
 Austin, Texas 78737
 U.S.A.
Telephone 512-668-9918
Fax 512-886-4008

1.4 Emergency telephone

Emergency Phone # US & Canada: 1-800-535-5053 INFOTRAC
 International 1-352-323-3500 INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute inhalation toxicity - Vapors (Category 2)
Reproductive toxicity (Category 1B)
Specific target organ toxicity (repeated exposure) (Category 1)
Target organs - Central nervous system (CNS), Kidney

2.2 GHS Label elements, including precautionary statements

Pictogram**Signal Word**

Danger

Hazard statements

Fatal if inhaled

May damage the unborn child

Causes damage to organs through prolonged or repeated exposure

Precautionary statements

Prevention Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Do not breathe dust/fumes/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area.

Wear respiratory protection

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Response IF exposed or concerned: Get medical attention/advice

Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a POISON CENTER or doctor/physician

Storage Store locked up

Store in a well-ventilated place. Keep container tightly closed.

Disposal Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Very toxic to aquatic life with long-lasting effects. Reproductive harm.

SECTION 3: Composition/information on ingredients**3.1 Components**

Chemical name	Common name and synonyms	CAS number	Concentration
Mercury	Colloidal mercury; Hydrargyrum; Metallic mercury.	7439-97-6	100%

SECTION 4: First aid measures**4.1 Description of first-aid measures****General advice**

If inhaled	Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
In case of skin contact	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required
In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
If swallowed	Do NOT induce vomiting. Call a physician or poison control center immediately

4.2 Most important symptoms and effects, both acute and delayed

None reasonably foreseeable.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: treat symptomatically

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Substance is nonflammable; use agent most appropriate to extinguish surrounding fire. Approved class D extinguishers.

Unsuitable extinguishing media Water may be ineffective.

5.2 Specific hazards arising from the substance or mixture

Very toxic. Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Keep product and empty container away from heat and sources of ignition. Do not allow run-off from fire-fighting to enter drains or water courses.

5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

5.4 Further information

Flash Point No information available

Autoignition Temperature No information available

Explosion limits

Upper No information available
Lower No information available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

NFPA

Health	Flammability	Instability	Physical hazards
-	-	-	-

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. No special precautions required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Should not be released into the environment. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Pick up and transfer to properly labelled containers.

6.4 Reference to other sections

See section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area. Keep in a dry place. Keep away from acids. Incompatible materials. Strong oxidizing agents. Ammonia. Metals. Halogens.

Incompatibilities

Strong oxidizing agents. Ammonia. Metals. Halogens.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Mercury	TWA	0.05 mg/m ³
	Ceiling	0.1 mg/m ³

US. ACGIH Threshold Limit Values

Component	Type	Value
Mercury	TWA	0.025 mg/m ³

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Mercury	IDLH	10 mg/m ³
	TWA	0.05 mg/m ³
	Ceiling	0.1 mg/m ³

8.2 Exposure controls

Appropriate engineering controls

Use only under a chemical fume hood. Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. None under normal use conditions.

Personal protective equipment

Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166

Skin protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Body Protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection

No special protective equipment required.

Control of environmental exposure

No information available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Silver
Odor	Odorless
Odor Threshold	No information available
pH	No information available
Melting Point/Range	-38.87 °C / -38 °F
Boiling Point/Range	356.72 °C / 674.1
Evaporation Rate	No information available
Flammability (solid)	Not applicable
Flammability or explosive limit	
Upper	No information available
Lower	No information available
Vapor Pressure	0.002 mmHg @ 2
Vapor Density	7
Density	No information available
Solubility	Insoluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No information available
Decomposition Temp	No information available
Viscosity	No information available
Molecular Formula	Hg
Molecular Weight	200.59
VOC Content(%)	No information available
Oxidizing properties	No information available

9.2 Other safety information

No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

None known, based on information available

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

Incompatible products. Excess heat.

10.5 Incompatible materials

Strong oxidizing agents, Ammonia, Metals, Halogens.

10.6 Hazardous decomposition products

Mercury oxide, toxic fumes.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Mercury	Not listed	Not listed	< 27 mg/m ³ - 2h

Skin corrosion/irritation

No information available

Serious eye damage/eye irritation

No information available

Respiratory or skin sensitization

No information available

Germ cell mutagenicity

No information available

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Mercury	7439-97-6	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

None known

Specific target organ toxicity - repeated exposure

Central nervous system, Kidney

Reproductive toxicity

No information available

Chronic effects

No information available

11.2 Additional Information

No information available

SECTION 12: Ecological information

12.1 Toxicity

This product contains substances which are hazardous for the environment. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

Product		Species	Test Results
Mercury	LC50	Freshwater fish	0.9 mg/L - 96h
	LC50	Freshwater fish	0.18 mg/L - 96h
	LC50	Freshwater fish	0.16 mg/L - 96h
	LC50	Freshwater fish	0.5 mg/L - 96h

12.2 Persistence and degradability

Insoluble in water. May persist.

12.3 Bio accumulative potential

No information available

12.4 Mobility in soil

Is not likely mobile in the environment due to its low water solubility.

12.5 Results of PBT and vPvB assessment

No information available

12.6 Endocrine disrupting properties

No information available

12.7 Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

UN-no	UN2809
Proper shipping name	Mercury
Hazard class	8
Subsidiary hazard class	6.1
Packing group	III

IMDG

UN-no	UN2809
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Proper shipping name Mercury
Hazard class 8
Subsidiary hazard class 6.1
Packing group III

IATA

UN-no UN2809
Proper shipping name Mercury
Hazard class 8
Subsidiary hazard class 6.1
Packing group III

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Listed

CERCLA Hazardous Substance List (40 CFR 302.4)

Listed

SARA 304 Emergency release notification

Not regulated

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not applicable

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

See all applicable hazards in section 2 of this document.

SARA 313 (TRI reporting)

Not regulated

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not applicable

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not applicable

Safe Drinking Water Act

Toxic pollutant. Priority pollutant.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed

US state regulations

US. Massachusetts RTK - Substance List

Listed

US. New Jersey Worker and Community Right-to-Know Act

Listed

US. Pennsylvania Worker and Community Right-to-Know Law

Listed

California Proposition 65

Listed

SECTION 16: Other information

Issue date: 08/20/2019

Revision 1: 07/03/2024

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

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