

## SAFETY DATA SHEET

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

#### 1.1 Product identifiers

Product name Mercurous Chloride

CAS number 10112-91-1

Synonyms Mercury(I) chloride

#### 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 oral toxicity	Category 3
Acute dermal toxicity	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Target organs - Respiratory system	

#### 2.2 GHS Label elements, including precautionary statements

**Pictogram**



**Signal Word**

Danger

**Hazard statements**

- Toxic if swallowed
- Harmful in contact with skin
- Causes skin irritation
- Causes serious eye irritation
- May cause respiratory irritation

**Precautionary statements**

- Prevention** Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product.  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area.
- Inhalation** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor/physician if you feel unwell
- Skin** IF ON SKIN: Wash with plenty of soap and water  
Call a POISON CENTER or doctor/physician if you feel unwell  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse
- Eyes** IF IN EYES: 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.
- Ingestion** IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
Rinse mouth
- 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.

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

**3.1 Components**

Chemical name	Common name and synonyms	CAS number	Concentration
Mercurous chloride	Mercury(I) chloride	10112-91-1	>95%

**SECTION 4: First aid measures**

## 4.1 Description of first-aid measures

### General advice

<b>If inhaled</b>	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.
<b>In case of skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
<b>In case of eye contact</b>	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
<b>If swallowed</b>	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** No information available

**Unsuitable extinguishing media** No information available

### 5.2 Specific hazards arising from the substance or mixture

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 data available

**Lower** No data available

**Sensitivity to Mechanical Impact** No information available

**Sensitivity to Static Discharge**

No information available

**NFPA**

Health	Flammability	Instability	Physical hazards
2	0	0	N/A

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation. 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. Local authorities should be advised if significant spillages cannot be contained.

### 6.3 Methods and materials for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

### 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. Avoid dust formation. Use only under a chemical fume hood. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance.

#### Hygiene measures

No information available

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

#### Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from direct sunlight.

#### Incompatibilities

Strong oxidizing agents.

## 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 chloride	(Vacated) Ceiling	0.1 mg/m <sup>3</sup>

### US. ACGIH Threshold Limit Values

Component	Type	Value
Mercury chloride	TWA	0.025 mg/m <sup>3</sup>

### US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Mercury chloride	IDLH	10 mg/m <sup>3</sup>
	TWA	0.05 mg/m <sup>3</sup>
	Ceiling	0.1 mg/m <sup>3</sup>

## 8.2 Exposure controls

### Appropriate engineering controls

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

### 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

#### Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

#### Control of environmental exposure

No information available

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical State	Solid
Appearance	Off-white
Odor	Odorless
Odor Threshold	No information available

pH	No information available
Melting Point/Range	400 °C / 752 °F
Boiling Point/Range	No information available
Evaporation Rate	No information available
Flammability (solid)	Not applicable
Flammability or explosive limit	No information available
Vapor Pressure	No information available
Vapor Density	Not applicable
Density	No information available
Solubility	Insoluble in water
Partition coefficient; n-octanol/water	No information available
Autoignition Temp	No information available
Decomposition Temp	No information available
Viscosity	Not applicable
Molecular Formula	Cl <sub>2</sub> Hg <sub>2</sub>
Molecular Weight	472.08
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

Sensitivity to light

### 10.3 Possibility of hazardous reactions

None under normal processing.

### 10.4 Conditions to avoid

Incompatible products. Excess heat. Avoid dust formation. Exposure to light.

### 10.5 Incompatible materials

Strong oxidizing agents.

### 10.6 Hazardous decomposition products

Hydrogen chloride gas.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Product Information, Component Information**

**Acute toxicity**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Mercury chloride	210 mg/kg (Rat)	1500 mg/kg (Rat)	Not listed

**Skin corrosion/irritation**

Irritating to eyes, respiratory system and skin

**Serious eye damage/eye irritation**

Irritating to eyes, respiratory system and skin

**Respiratory or skin sensitization**

No information available

**Germ cell mutagenicity**

No information available

**Carcinogenicity**

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Mercury chloride	10112-91-1	Not listed	Not listed	Not listed	Not listed	Not listed

**Specific target organ toxicity - single exposure**

Respiratory system

**Specific target organ toxicity - repeated exposure**

None known

**Reproductive toxicity**

No information available

**Chronic effects**

No information available

**11.2 Additional Information**

No information available

**SECTION 12: Ecological information**

**12.1 Toxicity**

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

Product		Species	Test Results	
Mercury chloride	LC50	Freshwater Fish	0.5 mg/L	48h
	ED50	Water Flea	0.002 mg/L	48h

**12.2 Persistence and degradability**

Insoluble in water

### 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.	UN2025
Proper Shipping Name	Mercury compound, solid, n.o.s.
Technical Name	Mercury chloride
Hazard Class	6.1
Packing Group	III

### IMDG

UN-no.	UN2025
Proper Shipping Name	Mercury compound, solid, n.o.s.
Hazard Class	6.1
Packing Group	III

### IATA

UN-no.	UN2025
Proper Shipping Name	Mercury compound, solid, n.o.s.
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)**



Not listed

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed

**SARA 304 Emergency release notification**

Not regulated

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous**

See section 2 for appropriate classifications

**SARA 313 (TRI reporting)**

Mercurous chloride Reporting Thresholds: 10 lb

**Other federal regulations**

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

Listed

**Safe Drinking Water Act**

Listed

**US state regulations**

**US. Massachusetts RTK - Substance List**

Not 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**

Not listed

**SECTION 16: Other information**

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**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.