

SAFETY DATA SHEET

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

1.1 Product identifiers

Product name: Silver Chloride
CAS number: 7783-90-6
Synonyms: Silver Monochloride, Chlorous Acid, Silver Salt

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
22111 Highway 71 West, Suite 601
Spicewood, Texas 78669
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)

Specific target organ toxicity (single exposure) (Category 3)
Target organs - Respiratory system.

2.2 GHS Label elements, including precautionary statements

Pictogram:



Signal Word:

Warning

Hazard statement(s):

May cause respiratory irritation.

Precautionary statement(s):

Prevention - Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. **Response** - 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.

Hazards not otherwise classified

None.

SECTION 3: Composition/information on ingredients

3.1 Components

Components	CAS-No.	Weight %
Silver Chloride	7783-90-6	100

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice:

None.

If inhaled:

Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.

In case of eye contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately if symptoms occur.

In case of skin contact:

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

If swallowed:

Do not induce vomiting. Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Irritating to respiratory system. Treat symptomatically.

4.3 Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable (and unsuitable) extinguishing media Small fire: dry chemical, CO2 or water spray. Large fire: dry chemical, CO2, alcohol resistant foam or water spray. Do not get water inside containers.

5.2 Specific hazards arising from the substance or mixture

Not applicable.

5.3 Special protective equipment and precautions for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

5.4 Further information

May be combustible at high temperature. Under fire conditions, hazardous fumes will be present.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

On land, sweep or shovel into suitable containers. Minimize generation of dust. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Shut off all sources of ignition. Evacuate the area. If necessary, employ water fog to disperse the vapors. Absorb the matter with compatible vermiculite or other absorbing material. Place in a suitable container and retain for disposal. Ventilate and clean the affected area. Do not flush into sewerage system or to drains.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Do not inhale. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Wash thoroughly after handling.

Hygiene measures

No information available.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Store in original container, tightly sealed container, protected from direct sunlight, in a dry, and well-ventilated area, away from incompatible materials. Store in accordance with local regulations. Eliminate all ignition sources. Separate from oxidizing materials. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Preserve in well-closed containers.

SECTION 8. Exposure controls/personal protection

8.1 Occupational exposure limits

Control parameters

Chemical Name: POTASSIUM CHLORIDE CAS #: 7447-40-7

	TWA	Ceiling	STEL	REL	IDLH	Remarks
OSHA PEL	N/L	N/L	-	-	-	-
ACGIH	N/L	N/L	N/L	-	-	-
NIOSH	N/L	N/L	N/L	N/L	N/L	-
AIHA WEEL	N/L	N/L	N/L	-	-	-
Safe Work Australia HSIS	N/L	N/L	N/L	-	-	-
HSE	N/L	N/L	N/L	-	-	-

N/L = Not Listed

8.2 Exposure controls

Appropriate engineering controls

Adequate mechanical ventilation. Fumehood, eye wash station, and safety shower. Change contaminated clothing. Wash hands after working with substance.

Personal protective equipment

Eye/face protection

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

Skin and body protection

Wear appropriate gloves to prevent skin exposure. Wear appropriate protective clothing to minimize contact with skin.

Respiratory protection

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

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Solid.
Appearance	Colorless, elongated, prismatic, or cubical crystals, or white, granular powder.
Odor	Odorless.
Odor Thresh	Not available.
pH	~ 7 (15 °C)
Melting Point/Range	(770-773)°C, (1418-1423.4)°F
Boiling Point/Range	1500 °C, 2732 °F (sublimes)
Flash Point	Not available.
Evaporation Rate	Not available.
Flammability (solid, gas)	This product is not flammable.
Flammability or explosive limit	
	Upper : NA
	Lower : NA
Vapor Pressure	< 0.0000001 kPa @ 25 °C
Vapor Density	Not available.
Density	Not available.
Solubility	Soluble in water.
Partition coefficient; n-octanol/water	Not available.
Autoignition Temp	Not available.
Decomposition Temp	Not available.
Viscosity	Not available.
Molecular Formula	KCl
Molecular Weight	74.55
VOC Content(%)	Not available.
Oxidizing properties	None.

9.2 Other safety information

Sublimation point - 1500 °C.
Solubility in other solvents - Ethanol 4.0 g/l

SECTION 10: Stability and reactivity

10.1 Reactivity

Not established.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Violent reactions possible with: Strong oxidizing agents.

10.4 Conditions to avoid

Moisture, sunlight and extreme temperatures.

10.5 Incompatible materials

Oxidizing agents. Acids.

10.6 Hazardous decomposition products

Toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxides and other gases may occur.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute Toxicity

Oral: Rat: LD50: (mg/kg): 2600
Dermal: Rabbit: LD50: (mg/kg): Not available.
Inhalation: Rat: LD50: (mg/L/4hr): Not available.

Skin corrosion/irritation

Due to lack of data the classification is not possible.

Serious eye damage/eye irritation

Causes eye irritation. Eye irritancy test: Rabbit: Mild irritation

Respiratory or skin sensitization

Due to lack of data the classification is not possible.

Germ cell mutagenicity

Based on available data, the classification criteria are not met. High concentrations of potassium chloride showed positive results in a range of genotoxic screening assays using mammalian cells in culture. The action of potassium chloride in culture seems to be an indirect effect without relevance in the intact body.

Carcinogenicity

OSHA: POTASSIUM CHLORIDE is not listed.

NTP: POTASSIUM CHLORIDE is not listed.

IARC: POTASSIUM CHLORIDE is not evaluated.

California Prop. 65: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Based on available data, the classification criteria are not met:
1820 mg/kg/day Long-term carcinogenicity study, administered in diet
Result: Negative
Species: Rat
Test Duration: 2 years

Reproductive toxicity

Based on available data, the classification criteria are not met:

235 mg/kg/day Developmental study

Result: No fetotoxic or teratogenic effects

Species: Mouse

310 mg/kg/day Developmental study

Result: No fetotoxic or teratogenic effects

Species: Rat

Specific target organ toxicity - single exposure

Due to lack of data the classification is not possible.

Specific target organ toxicity - repeated exposure

Due to lack of data the classification is not possible.

Aspiration hazard

Due to lack of data the classification is not possible.

Chronic effects

Not expected to present a significant hazard under anticipated conditions of normal use. Symptoms related to the physical, chemical, and toxicological characteristics: Nausea. Vomiting. Diarrhea. Stomach pain. Gas. Dizziness. Confusion. Anxiety. Fast heartbeat. Irregular heartbeat. Numbness, pain, tingling, or weakness in hands or feet. Shortness of breath. Tiredness. Weakness. Muscle pain. Heaviness of legs. Paralysis. Delayed and immediate effects of exposure: Hyperkalemia. Low blood pressure. Heart block. Medical conditions aggravated by exposure: Sickle cell or related anemias. Heart problems. Impaired kidney function. Adrenal insufficiency. Metabolic acidosis. Respiratory acidosis. Dehydration. Gastrointestinal constrictions. Familial periodic paralysis. Hyperkalemia. Diabetes. Heat cramps .

11.2 Additional information

Potential health effects:

Inhalation: May be harmful if inhaled. May cause irritation to mucous membranes and respiratory tract.

Ingestion: May be harmful if swallowed. Causes diarrhea, nausea, vomiting, weakness, convulsions.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: Causes eye irritation. Redness, pain.

SECTION 12. Ecological information

12.1 Toxicity

Ecotoxicity:

EC50: 48 Hr: Daphnia magna: (mg/L): Not available.

LC50: 96 Hr: Freshwater fish: (mg/L): Not available.

IC50: 72 Hr: Algae: (mg): Not available.

12.2 Persistence and degradability

No data is available on the degradability of this product.

12.3 Bio accumulative potential

Will not bio-accumulate.

12.4 Mobility in soil

Soluble in water (34g/100mL (20 °C)).

12.5 Results of PBT and vBvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

This product is not intended to be released into the environment.

SECTION 13. Disposal considerations

13.1 Waste Disposal Methods

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

SECTION 14: Transport information

DOT

UN-No	Not dangerous goods
Proper Shipping Name	
Hazard Class	
Packing Group	

IMDG/IMO

UN-No	Not dangerous goods
Proper Shipping Name	
Hazard Class	
Packing Group	

IATA

UN-No	Not dangerous goods
Proper Shipping Name	
Hazard Class	
Packing Group	

*Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information

Sara 302 Components

This material does not contain any components with a section 302 EHS TPQ.

Sara 313 Components

This material does not contain any components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Sara 311/312 Hazards

No SARA hazards.

Massachusetts Right to Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right to Know Components

Potassium Chloride (CAS 7447-40-7)

New Jersey Right to Know Components

Potassium Chloride (CAS 7447-40-7)

SECTION 16: Other information

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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.