

## SAFETY DATA SHEET

Creation Date 25-Oct-2010

Revision Date 24-Dec-2021

Revision Number 4

### 1. Identification

**Product Name** Silver chloride

**Cat No. :** AC211270000; AC211270010; AC211270100; AC211270500;  
AC211272500

**CAS No** 7783-90-6  
**Synonyms** Chlorous acid, silver salt; Silver Monochloride

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Food, drug, pesticide or biocidal product use.

#### Details of the supplier of the safety data sheet

##### Company

Fisher Scientific Company  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

**Emergency Telephone Number** For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

### 2. Hazard(s) identification

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Corrosive to metals

Category 1

#### Label Elements

##### **Signal Word**

Warning

##### **Hazard Statements**

May be corrosive to metals

**Precautionary Statements****Prevention**

Keep only in original container

**Spills**

Absorb spillage to prevent material damage

**Storage**

Store in corrosive resistant polypropylene container with a resistant inliner

**Hazards not otherwise classified (HNOC)**

Very toxic to aquatic life with long lasting effects

### 3. Composition/Information on Ingredients

| Component       | CAS No    | Weight % |
|-----------------|-----------|----------|
| Silver chloride | 7783-90-6 | >95      |

### 4. First-aid measures

|  |   |
|--|---|
| <b>General Advice</b>                      | If symptoms persist, call a physician.  |
| <b>Eye Contact</b>                         | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. |
| <b>Skin Contact</b>                        | Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.                       |
| <b>Inhalation</b>                          | Remove to fresh air. Get medical attention. If not breathing, give artificial respiration.                      |
| <b>Ingestion</b>                           | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.           |
| <b>Most important symptoms and effects</b> | None reasonably foreseeable.  |
| <b>Notes to Physician</b>                  | Treat symptomatically   |

### 5. Fire-fighting measures

|   |                          |
|---|--------------------------|
| <b>Unsuitable Extinguishing Media</b>   | No information available |
| <b>Flash Point</b>                      | No information available |
| <b>Method -</b>                         | No information available |
| <b>Autoignition Temperature</b>         | No information available |
| <b>Explosion Limits</b>                 |                          |
| <b>Upper</b>                            | No data available        |
| <b>Lower</b>                            | No data available        |
| <b>Sensitivity to Mechanical Impact</b> | No information available |
| <b>Sensitivity to Static Discharge</b>  | No information available |

**Specific Hazards Arising from the Chemical**

Do not allow run-off from fire-fighting to enter drains or water courses.

### Hazardous Combustion Products

Hydrogen chloride gas.

### 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.

### NFPA

Health  
2

Flammability  
0

Instability  
1

Physical hazards  
N/A

## 6. Accidental release measures

### Personal Precautions

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

### 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.

### Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

## 7. Handling and storage

### Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid ingestion and inhalation. Avoid dust formation. Do not get in eyes, on skin, or on clothing.

### Storage.

Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from direct sunlight. Incompatible Materials. Strong oxidizing agents.

## 8. Exposure controls / personal protection

### Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

| Component       | ACGIH TLV | OSHA PEL | NIOSH IDLH | Mexico OEL (TWA)           |
|-----------------|-----------|----------|------------|----------------------------|
| Silver chloride |           |          |            | TWA: 0.1 mg/m <sup>3</sup> |

### Engineering Measures

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 and body 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.

#### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

### Physical State Appearance

Solid  
Light grey

|  |                          |
|--|--------------------------|
| Odor                                   | Odorless                 |
| Odor Threshold                         | No information available |
| pH                                     | No information available |
| Melting Point/Range                    | 455 °C / 851 °F          |
| Boiling Point/Range                    | 1550 °C / 2822 °F        |
| Flash Point                            | No information available |
| Evaporation Rate                       | Not applicable           |
| Flammability (solid,gas)               | No information available |
| Flammability or explosive limits       |                          |
| Upper                                  | No data available        |
| Lower                                  | No data available        |
| Vapor Pressure                         | No information available |
| Vapor Density                          | Not applicable           |
| Specific Gravity                       | No information available |
| Solubility                             | Insoluble in water       |
| Partition coefficient; n-octanol/water | No data available        |
| Autoignition Temperature               | No information available |
| Decomposition Temperature              | No information available |
| Viscosity                              | Not applicable           |
| Molecular Formula                      | Ag Cl                    |
| Molecular Weight                       | 143.32                   |

## 10. Stability and reactivity

|                                  |  |
|----------------------------------|--|
| Reactive Hazard                  | None known, based on information available                                   |
| Stability                        | Stable under normal conditions. Sensitivity to light.                        |
| Conditions to Avoid              | Incompatible products. Excess heat. Avoid dust formation. Exposure to light. |
| Incompatible Materials           | Strong oxidizing agents  |
| Hazardous Decomposition Products | Hydrogen chloride gas  |
| Hazardous Polymerization         | Hazardous polymerization does not occur.                                     |
| Hazardous Reactions              | None under normal processing.  |

## 11. Toxicological information

### Acute Toxicity

#### Product Information Component Information

| Component       | LD50 Oral        | LD50 Dermal | LC50 Inhalation |
|-----------------|------------------|-------------|-----------------|
| Silver chloride | >5.11 g/kg (rat) | Not listed  | Not listed      |

**Toxicologically Synergistic Products** No information available

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

|                 |  |
|-----------------|--|
| Irritation      | No information available   |
| Sensitization   | No information available   |
| Carcinogenicity | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Component       | CAS No    | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|-----------------|-----------|------------|------------|------------|------------|------------|
| Silver chloride | 7783-90-6 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

|   |  |
|---|--|
| <b>Developmental Effects</b>                      | No information available.                                      |
| <b>Teratogenicity</b>                             | No information available.                                      |
| <b>STOT - single exposure</b>                     | None known   |
| <b>STOT - repeated exposure</b>                   | None known   |
| <b>Aspiration hazard</b>                          | No information available                                       |
| <b>Symptoms / effects, both acute and delayed</b> | No information available                                       |
| <b>Endocrine Disruptor Information</b>            | No information available                                       |
| <b>Other Adverse Effects</b>                      | The toxicological properties have not been fully investigated. |

## 12. Ecological information

### Ecotoxicity

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.

| Component       | Freshwater Algae | Freshwater Fish                            | Microtox | Water Flea |
|-----------------|------------------|--|----------|------------|
| Silver chloride | -                | Pimephales promelas:<br>LC50=1.93 mg/L 96h | -        | -          |

**Persistence and Degradability** Insoluble in water Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Is not likely mobile in the environment due its low water solubility. Will likely be mobile in the environment due to its water solubility.

## 13. Disposal considerations

**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.

## 14. Transport information

### DOT

UN-No UN1759  
 Proper Shipping Name Corrosive solid, n.o.s.  
 Hazard Class 8  
 Packing Group III

### TDG

UN-No UN1759  
 Proper Shipping Name CORROSIVE SOLID, N.O.S.\*  
 Hazard Class 8  
 Packing Group III

### IATA

UN-No UN1759  
 Proper Shipping Name CORROSIVE SOLID, N.O.S.\*  
 Hazard Class 8  
 Packing Group III

### IMDG/IMO

UN-No UN1759  
 Proper Shipping Name CORROSIVE SOLID, N.O.S.\*  
 Hazard Class 8  
 Packing Group III

## 15. Regulatory information

### United States of America Inventory

| Component       | CAS No    | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|-----------------|-----------|------|---|-----------------------------|
| Silver chloride | 7783-90-6 | X    | ACTIVE  | -                           |

#### Legend:

**TSCA** US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

**TSCA 12(b)** - Notices of Export      Not applicable

### International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component       | CAS No    | DSL | NDSL | EINECS    | PICCS | ENCS | ISHL | AICS | IECSC | KECL     |
|-----------------|-----------|-----|------|-----------|-------|------|------|------|-------|----------|
| Silver chloride | 7783-90-6 | X   | -    | 232-033-3 | X     | X    | X    | X    | X     | KE-31267 |

**KECL** - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

### U.S. Federal Regulations

#### SARA 313

| Component       | CAS No    | Weight % | SARA 313 - Threshold Values % |
|-----------------|-----------|----------|-------------------------------|
| Silver chloride | 7783-90-6 | >95      | 1.0                           |

**SARA 311/312 Hazard Categories**      See section 2 for more information

#### CWA (Clean Water Act)

| Component       | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|-----------------|----------------------------|-----------------------------|------------------------|---------------------------|
| Silver chloride | -                          | -                           | X                      | -                         |

**Clean Air Act**      Not applicable

**OSHA** - Occupational Safety and Health Administration      Not applicable

**CERCLA**      Not applicable

**California Proposition 65**      This product does not contain any Proposition 65 chemicals.

#### U.S. State Right-to-Know Regulations

| Component       | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|-----------------|---------------|------------|--------------|----------|--------------|
| Silver chloride | -             | X          | X            | -        | -            |

#### U.S. Department of Transportation

Reportable Quantity (RQ):      N

DOT Marine Pollutant      N

DOT Severe Marine Pollutant      N

**U.S. Department of Homeland**      This product does not contain any DHS chemicals.

## Security

Other International Regulations

Mexico - Grade No information available

## Authorisation/Restrictions according to EU REACH

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

| Component       | CAS No    | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|-----------------|-----------|----------|------------------------------|---------------------------|--|
| Silver chloride | 7783-90-6 | Listed   | Not applicable               | Not applicable            | Not applicable                             |

| Component       | CAS No    | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|-----------------|-----------|---|--|----------------------------|------------------------------------|
| Silver chloride | 7783-90-6 | Not applicable  | Not applicable   | Not applicable             | Not applicable                     |

**16. Other information**

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**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer**

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

**End of SDS**