

Date of issue: 09/01/2018

### Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Product name: Silver(I)chloride Product code(SDS NO): 7044E-1

Details of the supplier of the safety data sheet

Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.

Address: 3-1, Honmachibashi, Chuo-ku, Osaka 540-0029, JAPAN

Division: Safety Management Dept. of Chemicals

Telephone number: +81-6-6946-8061

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e-mail address: kagakuhinanzenkanri@kishida.co.jp

#### 2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

Physiacal and chemical hazards
Corrosive to metals: Category 1

#### **HEALTH HAZARDS**

Serious eye damage/eye irritation: Category 2B

Specific target organ toxicity - single exposure: Category 1(respiratory system)

Specific target organ toxicity – repeated exposure: Category 2(skin, respiratory system) (Note) GHS classification without description: Not applicable/Out of classification/Not classifiable

Label elements



# Signal word: Danger HAZARD STATEMENT

May be corrosive to metals

Causes eye irritation

Causes damage to organs after single exposure

May cause damage to organs through prolonged or repeated exposure

#### PRECAUTIONARY STATEMENT

#### Prevention

Keep only in original container.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash contaminated parts thoroughly after handling.

Do not eat, drink or smoke when using this product.

#### Response

Absorb spillage to prevent material damage.

Get medical advice/attention if you feel unwell.

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.

#### Storage

Store in corrosive resistant/···container with a resistant inner liner.

## Silver(I)chloride,KISHIDA CHEMICAL CO., LTD.,7044E-1,09/01/2018

#### Disposal

Dispose of contents/container in accordance with local/national regulation.

#### 3. Composition/information on ingredients

Mixture/Substance selection:

Substance

Ingredient name:Silver(I)chloride

Content(%):99(min)

Chemical formula:AgCl

Chemicals No, Japan:1-4

CAS No.:7783-90-6

MW:143.32

ECNO:232-033-3

Note: The figures shown above are not the specifications of the product.

#### 4. First-aid measures

Descriptions of first-aid measures

General measures

Get medical attention/advice if you feel unwell.

#### IF INHALED

Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water/shower.

If skin irritation or rash occurs: Get medical advice/attention.

#### 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.

#### IF SWALLOWED

Rinse mouth.

Call a POISON CENTER or doctor/physician if you feel unwell.

## 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

Specific hazards arising from the substance or mixture

Containers may explode when heated.

Fire may produce irritating, corrosive and/or toxic gases.

#### Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

Special protective equipment and precautions for fire-fighters

Wear fire/flame resistant/retardant clothing.

Wear protective gloves/protective clothing/eye protection/face protection.

Firefighters should wear self-contained breathing apparatus with full face peace operated positive pressure mode.



#### 6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Ventilate area after material pick up is complete.

Wear proper protective equipment.

Methods and materials for containment and cleaning up

Sweep up, place in a bag and hold for waste disposal.

Preventive measures for secondary accident

Absorb spillage to prevent material-damage.

Collect spillage.

#### 7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Do not breathe dust/fume/gas/mist/vapors/spray.

(Protective measures against fire and explosion)

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Exhaust/ventilator

Exhaust/ventilator should be available.

Safety treatments

Avoid contact with skin.

Avoid contact with eyes.

Safety Measures/Incompatibility

Wear protective gloves, protective clothing or face protection.

When using do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities

Recommendation for storage

Keep container tightly closed.

Store in a cool, dry place. Do not store in direct sunlight.

Incompatible storage condition

The product may corrode metal. Do not keep in a metal container.

Recommendation on container and packaging materials

Keep only in original container.

Store in corrosive resistant/...container with a resistant inner liner.

#### 8. Exposure controls/personal protection

Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Individual protection measures

Respiratory protection

Wear respiratory protection.

Hand protection

Wear protective gloves.

Eve protection

Wear eye/face protection.

Safety and Health measures

Wash ... thoroughly after handling.

Do not eat, drink or smoke when using this product.



#### 9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical properties

Appearance: Powder or blocking

Color: White~Light gray Odor: Practically odorless Phase change temperature

Initial Boiling Point/Boiling point: 1550°C Melting point/Freezing point: 455°C Decomposition temperature data N.A.

Flash point: (Silver(I)chloride)Incombustibility

Auto-ignition temperature data N.A.

Explosive properties data N.A. Vapor pressure data N.A. Vapor density data N.A.

Specific gravity/Density: 5.56(20°C)

Solubility

Solubility in water: Poor

n-Octanol /water partition coefficient data N.A.

#### 10. Stability and Reactivity

Chemical stability

May produce a blackening by light.

Conditions to avoid

Contact with incompatible materials.

Contact with fire source.

Incompatible materials

Ammonia water, Hydrogen peroxide solution, Potassium, Sodium, Silver, Chlorine

Hazardous decomposition products

Silver, Chlorine

#### 11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[Company proprietary data]

(Silver(I)chloride)

 $rat~LD50\!>\!10000~mg/kg$ 

No Irritant properties data available

No Allergenic and sensitizing effects data available

No Mutagenic effects data available

No Carcinogenic effects data available

No Teratogenic effects data available

No reproductive toxicity data available

Delayed and immediate effects and also chronic effects from short- and long-term exposure

STOT-single exposure

[cat.1]

[Company proprietary data]

(Silver(I)chloride) respiratory system



## Silver(I)chloride,KISHIDA CHEMICAL CO., LTD.,7044E-1,09/01/2018

STOT-repeated exposure

[cat.2]

[Company proprietary data]

(Silver(I)chloride) skin, respiratory system

No Aspiration hazard data available

Additional data

May cause lung disorders by massive inhalation of powdered substance.

-e.g. fibrosis of lung tissue, cough, sputum, breath shortness, dyspnea, decline of lung function, interstitial lung disease, pneumothorax

#### 12. Ecological Information

**Ecotoxicity** 

No Aquatic toxicity data available

No Persistence and degradability data available

No Bioaccumulative potential data available

No Mobility in soil data available

Ozone depleting chemical data not available

#### 13. Disposal considerations

Waste treatment methods

Dispose of contents/container in accordance with local/national regulation.

#### 14. Transport Information

UN number: 1759

UN proper shipping name:

CORROSIVE SOLID, N.O.S.

Transport hazard class(es): 8

Packing group: III ERG GUIDE NO.: 154

Special provisions NO.: 223; 274; A3; A803

#### 15. Regulatory Information

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

TSCA

Silver(I)chloride

Other regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

#### 16. Other information

GHS classification and labelling

Corr. Met. 1: H290 May be corrosive to metals

Eye Irrit. 2B: H320 Causes eye irritation

STOT SE 1: H370 Causes damage to organs after single exposure

STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure

#### Reference Book

Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 19th edit., 2015 UN



## $Silver(I) chloride, KISHIDA\ CHEMICAL\ CO.,\ LTD., 7044E-1,09/01/2018$

Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2017 TLVs and BEIs. (ACGIH)

http://monographs.iarc.fr/ENG/Classification/index.php

Supplier's data/information

Hazard Communication Standard - 2012

#### General Disclaimer

This information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It are advised to make their own tests to determinate the safety and suitability of each such product or combination for their own purposes.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2016).