

Safety Data Sheets

1. Identification

Product name : 1mol/L Silver nitrate solution

Name of supplier : JUNSEI CHEMICAL CO., LTD.

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Product code(SDS NO) : 95470jis_J_E1-1

2. Hazards identification

GHS classification and label elements of the product

GHS classification

HEALTH HAZARDS

Skin corrosion/irritation : Category 1B

ENVIRONMENT HAZARDS

Hazardous to the aquatic environment-acute toxicity : Category 1

Hazardous to the aquatic environment-chronic toxicity : Category 1

(Note) GHS classification without description : Not applicable/Out of classification/Not classifiable



Signal word : Danger

HAZARD STATEMENT

Causes severe skin burns and eye damage.

Very toxic to aquatic life

Very toxic to aquatic life with long lasting effects

PRECAUTIONARY STATEMENT

Prevention

Avoid release to the environment.

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

Wash contaminated parts thoroughly after handling.

Wear protective gloves, protective clothing or face protection.

Response

Collect spillage.

Immediately call a POISON CENTRE or doctor/physician.

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

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash contaminated clothing before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Storage

Store locked up.

Disposal

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

3. Composition/information on ingredients**Substance/Preparation :Preparation**

Ingredient name:Silver nitrate

content(%):ca. 17.0 (w/v)

Chemical formula:AgNO₃

Chemicals No, Japan:1-8

CAS No.:7761-88-8

MW:169.87

ECNO:231-853-9

Ingredient name:Water

content(%):Residual quantity of the ingredient mentioned above

Chemical formula:H₂O

CAS No.:7732-18-5

MW:18.02

ECNO:231-791-2

4. First-aid measures**General procedures**

Immediately call a POISON CENTRE or doctor/physician.

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.

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. Do NOT induce vomiting.

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

5. Fire-fighting measures**Suitable extinguishing media**

Use appropriate extinguishing media suitable for surrounding facilities.

The product is non-flammable.

Specific hazards arising from the chemical

Containers may explode when heated.

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

Runoff from fire control or dilution water may cause pollution.

Special protective equipment and precautions for fire-fighters

Wear fire/flame resistant/retardant clothing.

Wear cold insulating gloves/face shield/eye protection.

Firefighters should wear self-contained breathing apparatus with full face piece 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.

Environmental precautions

Avoid release to the rivers, lakes, ocean, groundwater.

Methods and materials for neutralization, containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

※Do NOT absorb in saw-dust or other combustible absorbents.

Preventive measures for secondary accident

Collect spillage.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

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

(Protective measures against fire & 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.

Avoid breathing dust, vapor, mist, or gas.

Safety Measures/Incompatibility

Wear protective gloves, protective clothing or face protection.

Use personal protective equipment as required.

When using do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities

Recommendation for storage

Keep container tightly closed.

Keep cool . Protect from sunlight.

Store in well-ventilated place.

Store locked up.

8. Exposure controls/personal protection

Control parameters e.g. occupational exposure limit values or biological limit values

Adopted value

(Silver nitrate) ACGIH(1992) TWA: (soluble compounds)0.01mg-Ag/m³ (Argyria)

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Protective equipment

Respiratory protection

Wear positive pressure self-contained breathing apparatus (SCBA).

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

Safety and Health measures

Wash ... thoroughly after handling.

Wash contaminated clothing before reuse.

9. Physical and Chemical Properties

Physical properties

Appearance :liquid

Color :colorless

Odor :None

pH data N.A.

Phase change temperature

Initial Boiling Point/Boiling point data N.A.

Melting point/Freezing point data N.A.

Decomposition temperature data N.A.

Flash point data N.A.

Auto-ignition temperature data N.A.

Explosions data N.A.

Vapor pressure data N.A.

Vapor density data N.A.

Specific gravity/Density data N.A.

Solubility

Solubility in water :miscible

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

10. Stability and Reactivity

Stability

Stable under normal storage/handling conditions.

Conditions to avoid

Contact with incompatible materials.

Heat.

Incompatible materials

Strong reducing agents

Combustible substances

Hazardous decomposition products

Nitrogen oxides

11. Toxicological Information

Symptoms related to the physical, chemical and toxicological characteristics

Acute toxicity

Oral component(s) data

(Silver nitrate) rat LD50 =1173 mg/kg (IUCLID, 2000)

Irritant properties

Skin corrosion/irritation

(Silver nitrate) human : corrosive (IUCLID, 2000)

Serious eye damage /irritation

(Silver nitrate) rabbit 1 mg ; SEVERE(RTECS)

No Allergenic and sensitizing effects data available

No Mutagenic effects data available

No Teratogenic effects data available

No Carcinogenic effects data available

No Toxicity for reproduction data available

No Delayed/chronic effects from short/long-term exposure data available

No Aspiration hazard data available

Additional data

There are no data available on the preparation itself.

12. Ecological Information

Ecotoxicity

Aquatic toxicity

Very toxic to aquatic life

Very toxic to aquatic life with long lasting effects

Aquatic acute toxicity component(s) data

(Silver nitrate) Crustacea (Daphnia magna) EC50=0.0006mg/L/48hr (CERI, 2002)

Water solubility

(Silver nitrate) 1220g/L (0°C)

No Persistence and degradability data available

Bioaccumulative potential

(Silver nitrate) BCF=600 (Check & Review, Japan)

Additional data

There are no data available on the preparation itself.

13. Disposal Considerations

Disposal methods

Avoid release to the environment (- if this is not the intended use).

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

14. Transport Information

UN No, UN CLASS

UN No :1760

UN CLASS :8

PG :II

Proper shipping name :CORROSIVE LIQUID, N.O.S.

ERG GUIDE NO :154

15. Regulatory Information

GHS classification and labelling

Skin Corr. 1B : H314 Causes severe skin burns and eye damage.

Aquatic Acute 1 : H400 Very toxic to aquatic life

Aquatic Chronic 1 : H410 Very toxic to aquatic life with long lasting effects

US major regulations

TSCA

Water; Silver nitrate

Other regulatory information

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

16. Other information

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (4th ed., 2011), UN

1mol/L Silver nitrate solution, JUNSEI CHEMICAL CO., LTD., 95470jis_J_E1-1, 11/06/2014

Recommendations on the TRANSPORT OF DANGEROUS GOODS 18th edit., 2013 UN
Classification, labelling and packaging of substances and mixtures (table 3-1 ECNO6182012)
2012 EMERGENCY RESPONSE GUIDEBOOK (US DOT)
2014 TLVs and BEIs. (ACGIH)

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

Supplier's data/information

Chemical Risk Information Platform (CHRIP)(NITE) <http://www.safe.nite.go.jp/japan/db.html>

GHS Classification Guidance for Enterprises 2013 Revised Edition (August, 2013, METI)

Other information

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 is advised to make their own tests to determine 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 EU official data