Silver nitrate solution

34294-6X1L

Version 1.5 Revision Date 06.11.2025

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

1.1. Product identifier

Product name	:	Silver nitrate solution
SDS-number	:	000000021495
Type of product	:	Mixture
Remarks	:	SDS according to Art. 31 of Regulation (EC) 1907/2006.

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture	:	Laboratory chemicals
Uses advised against	:	none

1.3. Details of the supplier of the safety data sheet

Company	:	Honeywell Specialty Chemicals Seelze GmbH Wunstorfer Straße 40 30926 Seelze Germany	Solstice Advanced Materials US, Inc. 115 Tabor Road Morris Plains, NJ 07950-2546 USA
Telephone	:	(49) 5137-999 0	
For further information, please contact:	:	SafetyDataSheet@solstice.com	

1.4. Emergency telephone number

Emergency telephone number	:	+1-703-527-3887 (ChemTrec-Transport) +1 303-739-1378 (Medical)
	:	Poison Control Center: United Kingdom: (+44) 844 892 0111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Short-term (acute) aquatic hazard Category 1
H400 Very toxic to aquatic life.
Long-term (chronic) aquatic hazard Category 2
H411 Toxic to aquatic life with long lasting effects.

2.2. Label elements

REGULATION (EC) No 1272/2008

Hazard pictograms :



Signal word : Warning

Hazard statements	:	H410	Very toxic to aquatic life with long lasting effects.
Precautionary statements	:	P273 P280	Avoid release to the environment. Wear protective gloves/ eye protection/ face protection.

2.3. Other hazards

Results of PBT and vPvB assessment, see chapter 12.5.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical name	CAS-No. Index-No. EC-No.	Classification 1272/2008	Concentration	Remarks
Silver nitrate	7761-88-8 047-001-00-2 231-853-9	Ox. Sol. 1; H271 Met. Corr. 1; H290 Skin Corr. 1A; H314 Eye Dam. 1; H318 Repr. 1B; H360D Aquatic Acute 1; H400 Aquatic Chronic 1; H410	< 0,25 %	M(Aquatic Acute) = 1.000 M(Aquatic Chronic) = 100

		EUH071		

Remaining components of this product are non-hazardous and/or are present at concentrations below reportable limits.

Occupational Exposure Limit(s), if available, are listed in Section 8.
For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice:
Move out of dangerous area. Immediately take off contaminated clothing and rinse body with plenty of water. First aider needs to protect himself.

Inhalation:
Move to fresh air. Call a physician if irritation develops or persists.

Skin contact:
Wash off immediately with plenty of water. If symptoms persist, call a physician.

Eye contact:
Protect unharmed eye. Rinse thoroughly with plenty of water, also under the eyelids. Call a physician immediately.

Ingestion:
Immediately give large quantities of water to drink. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

No data available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

See Section 11 for more detailed information on health effects and symptoms. :

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Water spray
Dry powder
Foam
Carbon dioxide (CO2)

Extinguishing media which shall not be used for safety reasons:
High volume water jet

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products formed under fire conditions.
Do not use a solid water stream as it may scatter and spread fire.
Keep away from reducing agents.
Substance/product in the dry state promotes fires.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit.
No unprotected exposed skin areas.
Prevent fire extinguishing water from contaminating surface water or the ground water system.The product itself does not burn.Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Wear personal protective equipment. Unprotected persons must be kept away. Avoid contact with skin, eyes and clothing.

6.2. Environmental precautions

Should not be released into the environment. Prevent further leakage or spillage if safe to do so.

6.3. Methods and materials for containment and cleaning up

Soak up with inert absorbent material.

Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling:
Do not breathe vapor. Wear personal protective equipment. Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion:
Normal measures for preventive fire protection. Substance/product in the dry state promotes fires.

Hygiene measures:
Take off all contaminated clothing immediately. Wash hands before breaks and at the end of workday. When using do not eat or drink. Keep working clothes separately.

7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions:
Store in original container. Keep containers tightly closed in a cool, well-ventilated place.

7.3. Specific end use(s)

no additional data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits:

Components	Basis / Value type	Value / Form of exposure	Exceeding Factor	Remarks
Silver nitrate	EH40 WEL	as Ag		Listed
Silver nitrate	EH40 WEL TWA	0,01 mg/m3 as Ag		
Silver nitrate	EU ELV TWA	0,01 mg/m3 as Ag		Indicative

EH40 WEL - UK. EH40 Workplace Exposure Limits (WELs), as amended
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EH40 WEL - UK. EH40 Workplace Exposure Limits (WELs), as amended
TWA - Time weighted average

DNEL/ PNEC-Values

Component	End-use/impact	Exposure duration	Value	Exposure routes	Remarks
Silver nitrate	Workers / Long-term systemic effects		0,016 mg/m3	Inhalation	
Silver nitrate	Consumers / Long-term systemic effects		0,0063 mg/m3	Inhalation	
Silver nitrate	Consumers / Long-term systemic effects		0,02mg/kg bw/d	Ingestion	

Component	Environmental compartment / Value	Remarks

Silver nitrate	Fresh water: 0,00004 mg/l	
Silver nitrate	Marine water: 0,00086 mg/l	Assessment factor: 10
Silver nitrate	Sewage treatment plant: 0,025 mg/l	
Silver nitrate	Fresh water sediment: 438,13 mg/kg dw	Assessment factor: 10
Silver nitrate	Marine sediment: 438,13 mg/kg dw	Assessment factor: 10
Silver nitrate	Soil: 1,41 mg/kg dw	

8.2. Exposure controls

Occupational exposure controls

The Personal Protective Equipment must be in accordance with EN standards:respirator EN 136, 140, 149; safety glasses EN 166; protective suit: EN 340, 463, 468, 943-1, 943-2; gloves EN 374, 511; safety shoes EN-ISO 20345.

Engineering measures
Use with local exhaust ventilation.

Personal protective equipment
Respiratory protection:
In the case of vapour formation use a respirator with an approved filter.

Hand protection:
Glove material: butyl-rubber
Glove thickness: 0,7 mm
Butoject® 898
Gloves must be inspected prior to use.
Replace when worn.

Remarks:Supplementary note: The specifications are based on information and tests from similar substances by analogy.
Due to varying conditions (e.g.temperature or other strains) it must be considered that the usage of a chemical protective glove in practice may be much shorter than the permeation time determined in accordance with EN 374.
Since actual conditions of practical use often deviate from standardised conditions according EN 374 the glove manufacturer reccomends to use the chemical protective glove in practice not longer than 50% of the recomended permeation time.
Manufacturer´s directions for use should be observed because of great diversity of types .
Suitable gloves tested according EN 374 are supplied e.g. from KCL GmbH, D-36124 Eichenzell, Vertrieb@kcl.de

Eye protection:
Safety goggles

Skin and body protection:
Wear suitable protective equipment.

Environmental exposure controls

Handle in accordance with local environmental regulations and good industrial practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

(a) Physical state	:	liquid
(b) Colour	:	colourless
(c) Odour	:	odourless
(d) Melting point/freezing point	:	No data available
(e) Boiling point/boiling range	:	No data available
(g) Lower and upper explosion limit	:	Lower explosion limit Not applicable
	:	Upper explosion limit Not applicable

(h) Flash point	:	Not applicable
(i) Auto-ignition temperature	:	No data available
(j) Decomposition temperature	:	No decomposition if used as directed.
(k) pH	:	No data available
(l) Viscosity, kinematic	:	No data available
(m) Solubility(ies)	:	Water solubility: soluble
(n) Partition coefficient: n-octanol/water	:	Not applicable
(o) Vapour pressure	:	No data available
(p) Density and / or relative density	:	No data available
(q) Relative vapour density	:	No data available
(r) Particle characteristics	:	No data available

9.2 Other Information

Polymer characteristics	:	No data available
Evaporation rate	:	No data available
Viscosity, dynamic	:	No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No decomposition if used as directed.

10.2. Chemical stability

No decomposition if used as directed.

10.3. Possibility of hazardous reactions

The product is oxidizing when dried.
Corrosive in contact with metals

10.4. Conditions to avoid

Protect from extreme heat and cold.
Keep away from reducing agents.

10.5. Incompatible materials

Strong reducing agents

10.6. Hazardous decomposition products

Nitrous gases

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

(a) Acute toxicity

Acute oral toxicity:
No data available

Acute dermal toxicity:
No data available

Acute inhalation toxicity:
No data available

Acute toxicity (other routes of administration):
No data available

(b) Skin corrosion/irritation:
No data available

(c) Serious eye damage/eye irritation:
No data available

(d) Respiratory or skin sensitisation:
No data available

(e) Germ cell mutagenicity:
Note: No data available

(f) Carcinogenicity:
Note: No data available

(g) Reproductive toxicity:
Remarks: No data available

(h) STOT-single exposure:
No data available

(i) STOT - repeated exposure:
Note: No data available

(j) Aspiration hazard:
No data available

11.2. Information on other hazards

Endocrine disrupting properties
No data available

Other information:
No data available

SECTION 12: Ecological information

12.1. Toxicity

Toxicity to fish:
No data available

Toxicity to aquatic plants:
No data available

Toxicity to aquatic invertebrates:
No data available

12.2. Persistence and degradability

Biodegradability:
The methods for determining biodegradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

Not applicable

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product:
Dispose according to legal requirements.

Packaging:
Legal requirements are to be considered in regard of reuse or disposal of used packaging materials

Further information:
Provisions relating to waste:
EC Directive 2006/12/EC; 2008/98/EEC
Regulation No. 1013/2006
For personal protection see section 8.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID:3082 IMDG:3082 IATA:3082

14.2 UN proper shipping name

ADR/RID:ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
IMDG:ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
IATA:Environmentally hazardous substance, liquid, n.o.s.

14.3 Transport hazard class(es)

ADR/RID:9 IMDG: 9 IATA: 9

14.4 Packaging group

ADR/RID:III IMDG: III IATA: III

14.5 Environmental hazards

ADR/RID: yes Marine pollutant: yes

14.6 Special precautions for user

Not regulated for transport when single and combination packagings are <= 5L for liquids or <= 5kg for solids per ADR SP 375, IMDG 2.10.2.7 and IATA SP A197.

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

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

Basis	Value	Remarks
Directive 2012/18/EC Listed in Regulation : E1: Hazardous to the aquatic environment	**Quantity**: 100.000 kg **Quantity**: 200.000 kg	
Substances of very high concern (SVHC)		This product does not contain substances of very high concern according to Regulation (EC) No Article 57 above the respective regulatory 1907/2006 (REACH), concentration limit of ≥ 0.1 % (w/w).

Other inventory information

USA. List of Active Substances on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory, as amended
On TSCA Inventory

Australia. Inventory of Industrial Chemicals (AIIC), as amended
On the inventory, or in compliance with the inventory

Canada. Domestic Substances List (DSL), as amended
All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List
On the inventory, or in compliance with the inventory

Korea. Existing Chemicals Inventory (KECI)
On the inventory, or in compliance with the inventory

Philippines. Inventory of Chemicals and Chemical Substances (PICCS)
On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC)
On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand
On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory (TCSI)
On the inventory, or in compliance with the inventory

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Text of H-statements referred to under heading 3

Silver nitrate	:	H271	May cause fire or explosion; strong oxidizer.
		H290	May be corrosive to metals.
		H314	Causes severe skin burns and eye damage.
		H318	Causes serious eye damage.
		H360D	May damage the unborn child.
		H400	Very toxic to aquatic life.
		H410	Very toxic to aquatic life with long lasting effects.
		EUH071	Corrosive to the respiratory tract.

Further information

All directives and regulations refer to amended versions.
Vertical lines in the left hand margin indicate a relevant amendment from the previous version.

Abbreviations:
EC European Community
CAS Chemical Abstracts Service
DNEL Derived no effect level
PNEC Predicted no effect level
vPvB Very persistent and very biaccumulative substance
PBT Persistent, bioaccmulative und toxic substance

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