Silver nitrate solution

35375-1L

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	:	000000020586
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

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

Corrosive to metals Category 1
H290 May be corrosive to metals.

Skin irritation Category 2
H315 Causes skin irritation.
Eye irritation Category 2
H319 Causes serious eye irritation.
Short-term (acute) aquatic hazard Category 1
H400 Very toxic to aquatic life.
Long-term (chronic) aquatic hazard Category 1
H410 Very toxic to aquatic life with long lasting effects.

2.2. Label elements

REGULATION (EC) No 1272/2008

Hazard pictograms :



Signal word : Warning

Hazard statements :	H290	May be corrosive to metals.
	H315	Causes skin irritation.
	H319	Causes serious eye irritation.
	H410	Very toxic to aquatic life with long lasting effects.
Precautionary statements :	P234	Keep only in original container.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/ eye protection/ face protection.
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P308 + P313	IF exposed or concerned: Get medical advice/ attention.

2.3. Other hazards

Do not breathe vapor. The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation

(EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. Product does not contain substances that are persistent, mobile, and toxic (PMT/vPvM) at levels of 0.1 % or higher.

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 EUH071	>= 0,25 % - < 2,5 %	M(Aquatic Acute) = 1.000 M(Aquatic Chronic) = 100

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. If easy to do, remove contact lens, if worn. Rinse thoroughly with plenty of water, also under the eyelids. Call a physician immediately.

Ingestion:
Never give anything by mouth to an unconscious person. Do NOT induce vomiting. 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

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.
In case of fire hazardous decomposition products may be produced such as:
Nitrous gases
Metal oxides

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

Wear personal protective equipment. Unprotected persons must be kept away.

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.
Do not pick up with the help of saw-dust or other combustible substances.
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. Never return unused material to storage receptacle. Protect from contamination. 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
-
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		0,0063 mg/m3	Inhalation	

	effects				
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.
Recommended Filter type:
ABEK-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.
Lab coat

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	:	< 0 °C
(e) Boiling point/boiling range	:	ca. 100 °C at 1.013 hPa
(f) Flammability	:	Not applicable

(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	:	Not applicable not auto-flammable
(j) Decomposition temperature	:	No decomposition if used as directed.
(k) pH	:	acidic
(l) Viscosity, kinematic	:	No data available
(m) Solubility(ies)	:	Water solubility: completely miscible
(n) Partition coefficient: n-octanol/water	:	Not applicable
(o) Vapour pressure	:	No data available
(p) Density and / or relative density	:	ca. 1,010 g/cm3 at 20 °C
(q) Bulk density	:	Not applicable
(q) Relative vapour density	:	No data available
(r) Particle characteristics	:	No data available

9.2 Other Information

Polymer characteristics	:	No data available
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

Corrosive to metals	:	Corrosive to metals
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
Dirt

10.6. Hazardous decomposition products

Nitrous gases
Metal oxides

SECTION 11: Toxicological information

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

(a) Acute toxicity

Acute oral toxicity:
Not classified due to data which are conclusive although insufficient for classification.

Acute dermal toxicity:
Not classified due to data which are conclusive although insufficient for classification.

Acute inhalation toxicity:
Not classified due to data which are conclusive although insufficient for classification.

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

(b) Skin corrosion/irritation:
Conclusive and supporting classification (Ref: REACH Dossier - ECHA disseminated data)

(c) Serious eye damage/eye irritation:
Conclusive and supporting classification (Ref: REACH Dossier - ECHA disseminated data)

(d) Respiratory or skin sensitisation:
Not classified due to data which are conclusive although insufficient for classification.

(h) STOT-single exposure:
No data available

(i) STOT - repeated exposure:
No data available

(j) Aspiration hazard:
No data available

11.2. Information on other hazards

Endocrine disrupting properties
The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Other information:
The product has not been tested. The information is derived from the properties of the individual components.

SECTION 12: Ecological information

12.1. Toxicity

Toxicity to fish:
Conclusive and supporting classification (Ref: REACH Dossier - ECHA disseminated data)

Toxicity to aquatic plants:
Conclusive and supporting classification (Ref: REACH Dossier - ECHA disseminated data)

Toxicity to aquatic invertebrates:
Conclusive and supporting classification (Ref: REACH Dossier - ECHA disseminated data)

12.2. Persistence and degradability

No data available

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

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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:3264 IMDG:3264 IATA:3264

14.2 UN proper shipping name
ADR/RID:CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.(SILVER NITRATE, SOLUTION)
IMDG:CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.(SILVER NITRATE,SOLUTION)
IATA:Corrosive liquid, acidic, inorganic, n.o.s.(Silver nitrate, Solution)

14.3 Transport hazard class(es)
ADR/RID:8 IMDG: 8 IATA: 8

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
IMDG Code segregation group (SGG1) – ACIDS,

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

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. Final determination of suitability of any material is the sole responsibility of the user.
This information should not constitute a guarantee for any specific product properties.
This document is not a UK REACH-compliant SDS, and the Great Britain importer bears full responsibility for UK REACH compliance. This document is provided to assist the Great Britain importers in ensuring their own compliance.