

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**14397-01 Silver Nitrate 1,128 N**

Revision date: 17.07.2018

Product code: 1439701

Page 1 of 8

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

14397-01 Silver Nitrate 1,128 N

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

Water analysis

**1.3. Details of the supplier of the safety data sheet**

Company name: HACH LANGE GmbH  
Street: Willstätterstr. 11  
Place: D-40549 Düsseldorf  
Telephone: +49 (0)211 5288-383  
e-mail: SDS@hach.com  
Internet: www.de.hach.com  
Responsible Department: HACH LANGE Ltd.  
5, Pacific Way  
Salford Manchester M50 1DL - United Kingdom  
Tel. +44 (0) 161 872 1487 \* Fax +44 (0) 161 848 7324  
e-Mail: info-uk@hach.com

HACH LANGE Ltd.  
Unit 1, Chestnut Road Western Industrial Estate  
IRL-Dublin 12  
Tel. +353 (0)1 4602522  
e-Mail: info-ie@hach.com

**1.4. Emergency telephone number:**

Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency service -

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Substance or mixture corrosive to metals: Met. Corr. 1

Skin corrosion/irritation: Skin Corr. 1B

Serious eye damage/eye irritation: Eye Dam. 1

Specific target organ toxicity - repeated exposure: STOT RE 1

Hazardous to the aquatic environment: Aquatic Chronic 1

Hazard Statements:

May be corrosive to metals.

Causes severe skin burns and eye damage.

Causes damage to organs through prolonged or repeated exposure.

Very toxic to aquatic life with long lasting effects.

**2.2. Label elements****Regulation (EC) No. 1272/2008****Hazard components for labelling**

silver nitrate

**Signal word:** Danger

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**14397-01 Silver Nitrate 1,128 N**

Revision date: 17.07.2018

Product code: 1439701

Page 2 of 8

**Pictograms:**

**Hazard statements**

- H290 May be corrosive to metals.  
 H314 Causes severe skin burns and eye damage.  
 H372 Causes damage to organs through prolonged or repeated exposure.  
 H410 Very toxic to aquatic life with long lasting effects.

**Precautionary statements**

- P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P310 Immediately call a POISON CENTER/doctor.  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P501 Dispose of contents/container to Disposal.

**Additional advice on labelling**

Classification according to EU Directives 67/548/EEC or 1999/45/EC  
 The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

**2.3. Other hazards**

None known.

**SECTION 3: Composition/information on ingredients**
**3.2. Mixtures**
**Hazardous components**

CAS No	Chemical name	Quantity
	EC No	
	Index No	
	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
7732-18-5	Water	80-90 %
	231-791-2	
7761-88-8	silver nitrate	10-20 %
	231-853-9	
	047-001-00-2	
	Ox. Sol. 2, Skin Corr. 1B, Aquatic Acute 1, Aquatic Chronic 1; H272 H314 H400 H410	

Full text of H and EUH statements: see section 16.

**SECTION 4: First aid measures**
**4.1. Description of first aid measures**
**General information**

Take off all contaminated clothing immediately.  
 Consult a physician. Show this safety data sheet to the doctor in attendance.

**After inhalation**

Move to fresh air.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 14397-01 Silver Nitrate 1,128 N

Revision date: 17.07.2018

Product code: 1439701

Page 3 of 8

#### After contact with skin

Wash off immediately with plenty of water for at least 15 minutes.  
Consult a physician. Show this safety data sheet to the doctor in attendance.

#### After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Show this safety data sheet to the doctor in attendance.

#### After ingestion

Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting.  
Consult a physician. Show this safety data sheet to the doctor in attendance.

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

Irritation and corrosion

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### **5.1. Extinguishing media**

##### **Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn.

#### **5.2. Special hazards arising from the substance or mixture**

Fire may liberate hazardous vapours.

#### **5.3. Advice for firefighters**

In the event of fire, wear self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

#### **Additional information**

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

### SECTION 6: Accidental release measures

#### **6.1. Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment.

#### **6.2. Environmental precautions**

Do not flush into surface water or sanitary sewer system.

#### **6.3. Methods and material for containment and cleaning up**

Soak up with inert absorbent material and dispose of as hazardous waste.

#### **6.4. Reference to other sections**

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

### SECTION 7: Handling and storage

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

Avoid contact with skin and eyes. Wash thoroughly after handling.

##### **Advice on protection against fire and explosion**

See also section 5

#### **7.2. Conditions for safe storage, including any incompatibilities**

##### **Requirements for storage rooms and vessels**

Keep tightly closed in a dry, cool and well-ventilated place.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**14397-01 Silver Nitrate 1,128 N**

Revision date: 17.07.2018

Product code: 1439701

Page 4 of 8

**Hints on joint storage**

None known.

**7.3. Specific end use(s)**

Reagent for analysis

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
-	Silver (soluble compounds as Ag)	-	0.01		TWA (8 h)	WEL

**Additional advice on limit values**

None known.

**8.2. Exposure controls****Appropriate engineering controls**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

**Protective and hygiene measures**

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Eye/face protection**

Safety glasses with side-shields

**Hand protection**

Use barrier skin cream.

Chemical resistant protective gloves

Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.

In full contact: Gloves material: Viton, Layer thickness: 0.70 mm, Breakthrough time: &gt;480 min. In splash

contact: Glove material: nitrile rubber, Layer thickness 0,20 mm, Breakthrough time: &gt; 30 min

**Skin protection**

Avoid contact with skin and eyes.

Remove and wash contaminated clothing before re-use.

**Respiratory protection**

Ensure adequate ventilation, especially in confined areas.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state:	liquid
Colour:	colourless
Odour:	odourless
pH-Value (at 20 °C):	4,3

**Changes in the physical state**

Melting point:	-4 °C
Initial boiling point and boiling range:	101 °C
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	no data available
:	no data available

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**14397-01 Silver Nitrate 1,128 N**

Revision date: 17.07.2018

Product code: 1439701

Page 5 of 8

Flash point: not applicable

Sustaining combustion: No data available

**Flammability**

Solid: not applicable

Gas: not applicable

**Explosive properties**

not applicable

Lower explosion limits: not applicable

Upper explosion limits: not applicable

Ignition temperature: no data available

**Auto-ignition temperature**

Solid: not applicable

Gas: not applicable

Decomposition temperature: no data available

**Oxidizing properties**

not applicable

Vapour pressure: no data available

Vapour pressure: no data available

Density: no data available

Bulk density: not applicable

Water solubility: soluble

**Solubility in other solvents**

no data available

Partition coefficient: no data available

Viscosity / dynamic: no data available

Viscosity / kinematic: no data available

Flow time: no data available

Vapour density: 0,62

Evaporation rate:  
(at 25 °C) 23 mm Hg

Solvent separation test: no data available

Solvent content: no data available

**9.2. Other information**

Solid content: not applicable

Corrosive in contact with metals

Aluminium : 14 mm/a

**SECTION 10: Stability and reactivity****10.1. Reactivity**

See also section 10.3

**10.2. Chemical stability**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

No dangerous reaction known under conditions of normal use.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 14397-01 Silver Nitrate 1,128 N

Revision date: 17.07.2018

Product code: 1439701

Page 6 of 8

#### **10.4. Conditions to avoid**

Extremes of temperature and direct sunlight.

#### **10.5. Incompatible materials**

Oxidizing agents

#### **10.6. Hazardous decomposition products**

No decomposition if used as directed.

#### **Further information**

None known.

### **SECTION 11: Toxicological information**

#### **11.1. Information on toxicological effects**

##### **Acute toxicity**

No data is available on the product itself.

##### **Irritation and corrosivity**

Causes burns.

##### **Sensitising effects**

Contains no substance or substances classified as sensitising.

##### **Carcinogenic/mutagenic/toxic effects for reproduction**

Contains no ingredient listed as a carcinogen

##### **STOT-single exposure**

The substance or mixture is not classified as specific target organ toxicant, single exposure.

##### **STOT-repeated exposure**

H372 - Causes damage to organs through prolonged or repeated exposure.

##### **Aspiration hazard**

No aspiration toxicity classification

##### **Specific effects in experiment on an animal**

No data is available on the product itself.

##### **Additional information on tests**

no data available

##### **Practical experience**

##### **Observations relevant to classification**

no data available

##### **Other observations**

no data available

#### **Further information**

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

### **SECTION 12: Ecological information**

#### **12.1. Toxicity**

EC50 (calculated) ( Fish) = 3,07 mg/l

EC50/48h/daphnia = 0,0094 mg/l

May cause long-term adverse effects in the aquatic environment.

Do not flush into surface water or sanitary sewer system.

#### **12.2. Persistence and degradability**

No data is available on the product itself.

#### **12.3. Bioaccumulative potential**

No data is available on the product itself.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**14397-01 Silver Nitrate 1,128 N**

Revision date: 17.07.2018

Product code: 1439701

Page 7 of 8

**12.4. Mobility in soil**

Mobile in soils

**12.5. Results of PBT and vPvB assessment**

no data available

**12.6. Other adverse effects**

Discharge into the environment must be avoided.

**Further information**

M-Factor = 100

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Advice on disposal**

In accordance with local and national regulations.

**Waste disposal number of waste from residues/unused products**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

**Waste disposal number of used product**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

**Waste disposal number of contaminated packaging**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

**Contaminated packaging**

Dispose of as unused product.

**SECTION 14: Transport information****Land transport (ADR/RID)**

<b><u>14.1. UN number:</u></b>	UN 1760
<b><u>14.2. UN proper shipping name:</u></b>	Corrosive liquid, n.o.s., (Silbernitratlösung)
<b><u>14.3. Transport hazard class(es):</u></b>	8
<b><u>14.4. Packing group:</u></b>	III

**Inland waterways transport (ADN)****Other applicable information (inland waterways transport)**

Not tested

**Marine transport (IMDG)**

<b><u>14.1. UN number:</u></b>	UN 1760
<b><u>14.2. UN proper shipping name:</u></b>	Corrosive liquid, n.o.s. (Silver nitrate solution)
<b><u>14.3. Transport hazard class(es):</u></b>	8
<b><u>14.4. Packing group:</u></b>	III
Marine pollutant:	--

**Air transport (ICAO-TI/IATA-DGR)**

<b><u>14.1. UN number:</u></b>	UN 1760
<b><u>14.2. UN proper shipping name:</u></b>	Corrosive liquid, n.o.s. (Silver nitrate solution)
<b><u>14.3. Transport hazard class(es):</u></b>	8

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**14397-01 Silver Nitrate 1,128 N**

Revision date: 17.07.2018

Product code: 1439701

Page 8 of 8

**14.4. Packing group:** III**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: yes



Danger releasing substance: silver nitrate

**14.6. Special precautions for user**

no data available

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

not applicable

**Other applicable information**

Additional Information: This product may be shipped as part of a chemical kit composed of various compatible dangerous goods for analytical or testing purposes. This kit would have the following classification: Proper Shipping Name: Chemical Kit, Hazard Class: 9, UN Number 3316, Package group II, EMS Code: F-A, S-P

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulatory information**

Water contaminating class (D): 3 - highly water contaminating

**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information****Changes**

Revision: 17.07.2018

Safety datasheet sections which have been updated: 14.5

Revision: 26.05.2015

Safety datasheet sections which have been updated: 2-16

Revision: 09.03.2012 Safety datasheet sections which have been updated: 8

**Relevant H and EUH statements (number and full text)**

H272 May intensify fire; oxidiser.  
H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.  
H372 Causes damage to organs through prolonged or repeated exposure.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.

**Further Information**

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*