

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 07.06.2021

Version number 2.0

Revision: 02.06.2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name:** Silver nitrate, for analysis, ExpertQ®, ACS, ISO, Reag. Ph Eur**Article number:** PL0050**CAS Number:**

7761-88-8

EC number:

231-853-9

Index number:

047-001-00-2

Registration number 01-2119513705-43-XXXX**1.2 Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

Application of the substance / the preparation: Laboratory reagent**1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

Scharlab, S.L.

C/Gato Pérez, 33. Pol.Ind. Mas d'en Cisa

08181 Sentmenat (Barcelona) SPAIN

Tel: (+34) 93 745 64 00 - FAX: (+34) 93 715 27 65

email: scharlab@scharlab.com

Internet Web Site: www.scharlab.com

Regional representation:

Scharlab, S.L.

C/Gato Pérez, 33. Pol.Ind. Mas d'en Cisa

08181 Sentmenat (Barcelona) SPAIN

Tel: (+34) 93 745 64 00 - FAX: (+34) 93 715 27 65

email: scharlab@scharlab.com

Internet Web Site: www.scharlab.com

Further information obtainable from: technical department**1.4 Emergency telephone number:**

Please contact the regional Scharlab distributor/dealer in your country

During normal opening times: Scharlab, S.L. (+34) 93 715 18 11

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

GHS03 flame over circle

Ox. Sol. 2

H272 May intensify fire; oxidiser.



GHS05 corrosion

Skin Corr. 1B

H314 Causes severe skin burns and eye damage.



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

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

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 07.06.2021

Version number 2.0

Revision: 02.06.2021

Trade name: Silver nitrate, for analysis, ExpertQ®, ACS, ISO, Reag. Ph Eur

(Contd. of page 1)

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS03 GHS05 GHS09

Signal word Danger**Hazard statements**

H272 May intensify fire; oxidiser.

H314 Causes severe skin burns and eye damage.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

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.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****3.1 Chemical characterisation: Substances****CAS No. Description**

7761-88-8 silver nitrate

Identification number(s)**EC number:** 231-853-9**Index number:** 047-001-00-2**SECTION 4: First aid measures****4.1 Description of first aid measures****General information:** Immediately remove any clothing soiled by the product.**After inhalation:** In case of unconsciousness place patient stably in side position for transportation.**After skin contact:** Immediately wash with water and soap and rinse thoroughly.**After eye contact:**

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.**4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

(Contd. on page 3)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 07.06.2021

Version number 2.0

Revision: 02.06.2021

Trade name: Silver nitrate, for analysis, ExpertQ®, ACS, ISO, Reag. Ph Eur

(Contd. of page 2)

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- **For safety reasons unsuitable extinguishing agents:**
For this substance/mixture no limitations of extinguishing agents are given.
- **5.2 Special hazards arising from the substance or mixture**
Not combustible.
Promotes the formation of oxygen evolution fires.
During heating or in case of fire poisonous gases are produced.
Fire may cause evolution of:
Nitrogen oxides
- **5.3 Advice for firefighters**
- **Protective equipment:**
Stay in danger area only with artificial systems and independent breathing apparatus.
Protection of the skin, keep a safety distance and wear suitable protective clothing.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Prevent formation of dust.
Prevent formation of aerosols.
Wear an individual protective equipment.
Wear chemically sealed goggles and / or face shield.
Avoid contact with eyes and skin.
Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:**
Processing of solid materials may result in the formation of combustible dusts.
Keep ignition sources away - Do not smoke.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.06.2021

Version number 2.0

Revision: 02.06.2021

Trade name: Silver nitrate, for analysis, ExpertQ®, ACS, ISO, Reag. Ph Eur

(Contd. of page 3)

- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Observe the product label precautions and storage information.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store receptacle in a well ventilated area.
Protect from exposure to the light.
- **Storage class:** Storage class (TRGS 510): 5.1B: Oxidizing hazardous materials.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:**

7761-88-8 silver nitrate

WEL Long-term value: 0.01 mg/m³
as Ag

- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Respiratory protection:**
Use suitable respiratory protective device only when aerosol or mist is formed.
Recommended filter: Filter type E-(P2)
- **Protection of hands:**



Protective gloves

Nitrile rubber gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 07.06.2021

Version number 2.0

Revision: 02.06.2021

Trade name: Silver nitrate, for analysis, ExpertQ®, ACS, ISO, Reag. Ph Eur

(Contd. of page 4)

· Eye protection:

Tightly sealed goggles

SECTION 9: Physical and chemical properties**· 9.1 Information on basic physical and chemical properties****· General Information****· Appearance:****Form:**

Crystalline

Colour:

White

· Odour:

Odourless

· Odour threshold:

Not determined.

· pH-value:

Not applicable.

· Change in condition**Melting point/freezing point:**

210 °C

Initial boiling point and boiling range: 444 °C**· Flash point:**

Not applicable.

· Flammability (solid, gas):

Contact with combustible material may cause fire.

· Decomposition temperature:

Not determined.

· Auto-ignition temperature:

Not determined.

· Explosive properties:

Product does not present an explosion hazard.

· Explosion limits:**Lower:**

Not determined.

Upper:

Not determined.

· Vapour pressure:

Not applicable.

· Density at 20 °C:4.35 g/cm³**· Relative density**

Not determined.

· Vapour density

Not applicable.

· Evaporation rate

Not applicable.

· Solubility in / Miscibility with water at 20 °C:

2.192 g/l

· Partition coefficient: n-octanol/water: Not determined.**· Viscosity:****Dynamic:**

Not applicable.

Kinematic:

Not applicable.

· 9.2 Other information

No further relevant information available.

SECTION 10: Stability and reactivity**· 10.1 Reactivity** Has a corrosive effect.**· 10.2 Chemical stability****· Thermal decomposition / conditions to be avoided:** Sensitivity to light.**· 10.3 Possibility of hazardous reactions**

Risk of ignition or formation of inflammable gases/vapours/dusts with:

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.06.2021

Version number 2.0

Revision: 02.06.2021

Trade name: Silver nitrate, for analysis, ExpertQ®, ACS, ISO, Reag. Ph Eur

(Contd. of page 5)

Alcohols, arsenic, ammonia, acetylene, aldehydes, azides, carbides, ethanol, magnesium, nitriles, sodium hydroxide, hydrazine and derivatives, nonmetals, organic nitro compounds, oxidisable substances, combustible substances.

10.4 Conditions to avoid

Heat

Exposure to light

10.5 Incompatible materials: Aluminium and mild steel.**10.6 Hazardous decomposition products:** In case of fire: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects**Acute toxicity** Based on available data, the classification criteria are not met.**LD/LC50 values relevant for classification:**

Oral LD50 50 mg/kg (mouse)

Primary irritant effect:**Skin corrosion/irritation**

In vitro study

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Eyes - Rabbit

Risk of blindness.

Causes severe skin burns and eye damage.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.**Additional toxicological information:****CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)****Germ cell mutagenicity**

Ames test

Salmonella typhimurium

Result: negative

Carcinogenicity Based on available data, the classification criteria are not met.**Reproductive toxicity** Based on available data, the classification criteria are not met.**STOT-single exposure** Based on available data, the classification criteria are not met.**STOT-repeated exposure** Based on available data, the classification criteria are not met.**Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity**Aquatic toxicity:** No further relevant information available.**12.2 Persistence and degradability** No further relevant information available.**12.3 Bioaccumulative potential** No further relevant information available.**12.4 Mobility in soil** No further relevant information available.**Ecotoxicological effects:****Remark:** Very toxic for fish**Additional ecological information:****General notes:**

Water hazard class 3 (German Regulation) (Assessment by list): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.06.2021

Version number 2.0

Revision: 02.06.2021

Trade name: Silver nitrate, for analysis, ExpertQ®, ACS, ISO, Reag. Ph Eur

(Contd. of page 6)

- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- | | |
|---|--|
| <ul style="list-style-type: none"> • 14.1 UN-Number • ADR, IMDG, IATA | UN1493 |
| <ul style="list-style-type: none"> • 14.2 UN proper shipping name • ADR | 1493 SILVER NITRATE, ENVIRONMENTALLY HAZARDOUS SILVER NITRATE |
| <ul style="list-style-type: none"> • IMDG, IATA • 14.3 Transport hazard class(es) • ADR | 5.1 Oxidising substances. |
| <div style="display: flex; align-items: center;">   </div> | 5.1 |
| <ul style="list-style-type: none"> • Class • Label | 5.1 |
| | |
| <ul style="list-style-type: none"> • IMDG, IATA | |
| <div style="display: flex; align-items: center;">  </div> | |
| <ul style="list-style-type: none"> • Class • Label | 5.1 Oxidising substances. |
| <ul style="list-style-type: none"> • 14.4 Packing group • ADR, IMDG, IATA • 14.5 Environmental hazards: • Marine pollutant: • Special marking (ADR): • 14.6 Special precautions for user • Hazard identification number (Kemler code): • EMS Number: • Segregation groups | 5.1
II
Environmentally hazardous substance, solid
No
Symbol (fish and tree)
Warning: Oxidising substances.
50
F-A,S-Q
Heavy metals and their salts (including their organometallic compounds)
A |
| <ul style="list-style-type: none"> • Stowage Category • 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 07.06.2021

Version number 2.0

Revision: 02.06.2021

Trade name: Silver nitrate, for analysis, ExpertQ®, ACS, ISO, Reag. Ph Eur

(Contd. of page 7)

· Transport/Additional information:

- **ADR**
- **Limited quantities (LQ)** 1 kg
- **Transport category** 2
- **Tunnel restriction code** E
- **UN "Model Regulation":** UN 1493 SILVER NITRATE, 5.1, II, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I -**
- **Seveso category**
P8 OXIDISING LIQUIDS AND SOLIDS
E1 Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**
Substance is not listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Classification according to Regulation (EC) No 1272/2008**
The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.
- **Department issuing SDS:** product safety department
- **Contact:** msds@scharlab.com
- **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Ox. Sol. 2: Oxidizing solids – Category 2
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1