

# SAFETY DATA SHEET

(In accordance with COMMISSION REGULATION (EU) No 453/2010)

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

### Product identifier

**Product code** 1856218  
**Product name** Silver Stain  
**Chemical Name** Not Applicable  
**REACH registration number** No registration number is given yet for this substance / substances in this mixture since the annual import quantity is less than one tonnage per annum or the transition period for its registration according to Article 23 of REACH has not yet expired.

### Relevant identified uses of the substance or mixture and uses advised against

**Relevant identified uses** For research use only  
**Use Description Code** SU22 - Public domain (administration, education, entertainment, services, craftsmen), PROC15 - Use as a laboratory reagent, PC21 - Laboratory chemicals, SU24 - Scientific research and development  
**Uses advised against** Not for consumer use.

### Details of the supplier of the safety data sheet

#### Manufacturer/Supplier

LIFE TECHNOLOGIES EUROPE BV  
KWARTSWEG 2  
2665 NN BLEISWIJK  
NETHERLANDS  
31-(0)180 392 400  
Email: MSDS@lifetech.com

Thermo Fisher Scientific  
Pierce Biotechnology  
P.O. Box 117  
Rockford, IL 61105  
United States  
1.815.968.0747 or  
1.800.874.3723

**24 hour Emergency Response for Hazardous Materials [or Dangerous Goods] Incident. Spill, Leak, Fire, Exposure, or Accident. Call CHEMTREC** Within the USA + Canada: 1-800-424-9300 and +1 703-527-3887  
Outside the USA + Canada: +1 703-741-5970

#### Country specific Emergency Number (if available):

CHEMTREC Ireland (Dublin) +(353)-19014670 (Greeting Language: English and Irish)  
CHEMTREC UK (London) +(44)-870-8200418 (Greeting Language: English)

**Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008 [CLP]****Physical hazards**

Not classified

**Health hazards**

Not classified

**Environmental Hazards**

Acute aquatic toxicity

Category 1

**Label elements****Labelling according to Regulation (EC) No 1272/2008 [CLP]****Hazard pictograms****Signal word**

Warning

**Hazard Statements**

H400 - Very toxic to aquatic life

**Precautionary Statements****Prevention**

P273 - Avoid release to the environment

**Response**

P391 - Collect spillage

**Storage**

Not Applicable

**Disposal**

P501 - Dispose of contents/ container to an approved waste disposal plant

### SECTION 3: Composition/information on ingredients

Component	CAS-No.	EINECS-No.	Weight percent	REACH registration number	Classification according to Regulation (EC) No 1272/2008 [CLP]
Silver nitrate 7761-88-8 ( <0.25 )	7761-88-8	231-853-9	<0.25	01-2119513705-43-X XXX	Oxid. Sol. 2 - H272Corr. 1B - H314Acute 1 - H400Chronic 1 - H410

### SECTION 4: First aid measures

#### Description of first aid measures

<b>Skin contact</b>	Rinse with plenty of water. Immediate medical attention is not required.
<b>Eye contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
<b>INGESTION</b>	Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.
<b>Inhalation</b>	Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.
<b>Notes to Physician</b>	Treat symptomatically.

#### Most important symptoms and effects, both acute and delayed

H400 - Very toxic to aquatic life

#### Indication of any immediate medical attention and special treatment needed

None.

### SECTION 5: Firefighting measures

#### Extinguishing media

<b>Suitable Extinguishing Media</b>	Water spray. Carbon dioxide (CO2). Foam. Dry chemical.
<b>Unsuitable Extinguishing Media</b>	No information available.

**Special hazards arising from the substance or mixture** Not known.

**Advice for fire-fighters** Standard procedure for chemical fires.

### SECTION 6: Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Use personal protection equipment. See Section 8 for more detail.

#### Environmental precautions

No special environmental precautions required. Avoid discharge into drains and waterways whenever possible.

#### Methods and material for containment and cleaning up

Soak up with inert absorbent material.

#### Reference to other sections

See section 8 for more information.

## SECTION 7: Handling and storage

### **Precautions for safe handling**

Use personal protective equipment as required. Wear personal protective equipment.

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

Keep in a dry, cool and well-ventilated place. Keep in properly labelled containers.

### **Specific end use(s)**

For research use only.

SECTION 8: Exposure controls/personal protection

**Control parameters**

Chemical Name	EU OEL (TWA)	EU OEL (STEL)	EU Skin Notation
Silver nitrate 7761-88-8	0.01 mg/m <sup>3</sup>	None	None

  

Chemical Name	Austria	Belgium (TWA)	Denmark (TWA)	Finland OEL (TWA)
Silver nitrate 7761-88-8	0.01 mg/m <sup>3</sup>	0.01 mg/m <sup>3</sup>	0.01 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>

  

Chemical Name	France OEL (VME)	Germany OEL (TWA)	Ireland (TWA)	Italy OEL (TWA)
Silver nitrate 7761-88-8	0.01 mg/m <sup>3</sup>	0.01 mg/m <sup>3</sup> exposure factor 2	0.01 mg/m <sup>3</sup>	0.01 mg/m <sup>3</sup>

  

Chemical Name	Sweden - Occupational Exposure Limits - TLVs (LLVs)	Netherlands OEL (MAC)	Spain OEL (TWA)	United Kingdom
Silver nitrate 7761-88-8	0.01 mg/m <sup>3</sup> LLV (total dust, as Ag); 0.1 mg/m <sup>3</sup> LLV (sparingly soluble, total dust, as Ag)	0.01 mg/m <sup>3</sup>	0.01 mg/m <sup>3</sup>	0.01 mg/m <sup>3</sup> TWA (as Ag)

  

Chemical Name	European Union	France OEL (VME)	Germany OEL (TWA)
Silver nitrate 7761-88-8	None	0.01 mg/m <sup>3</sup>	0.01 mg/m <sup>3</sup> exposure factor 2

  

Chemical Name	Italy OEL (TWA)	Portugal	Netherlands OEL (MAC)	Finland OEL (TWA)
Silver nitrate 7761-88-8	0.01 mg/m <sup>3</sup>	None	0.01 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>

  

Chemical Name	Austria	Denmark	Poland	Switzerland
Silver nitrate 7761-88-8	0.01 mg/m <sup>3</sup>	None	None	None

  

Chemical Name	Ireland	Norway	Lithuania OEL (TWA)	Spain OEL (TWA)
Silver nitrate 7761-88-8	None	None	0.01 mg/m <sup>3</sup> 0.1 mg/m <sup>3</sup>	0.01 mg/m <sup>3</sup>

**Engineering measures**      Ensure adequate ventilation, especially in confined areas.

**Exposure controls**

**Personal protection equipment**

**Respiratory protection**      In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.

**Hand Protection**              Wear suitable gloves. Glove material: Compatible chemical-resistant gloves.

**Eye protection**                Tight sealing safety goggles.

**Skin and body protection**    Wear suitable protective clothing.

**Hygiene measures**             Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls**

No special environmental precautions required.

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

<b>Appearance</b>	Liquid	
<b>Odour</b>	Odourless	
<b>Melting point / melting range</b>	°C Mixture has not been tested	°F Mixture has not been tested
<b>Boiling point / boiling range</b>	°C Mixture has not been tested	°F Mixture has not been tested
<b>Flash point</b>	°C Mixture has not been tested	°F Mixture has not been tested
<b>Autoignition temperature</b>	°C Mixture has not been tested	°F Mixture has not been tested
<b>Decomposition temperature</b>	°C Mixture has not been tested	°F Mixture has not been tested
<b>Evaporation rate</b>	No data available	
<b>Flammability (solid, gas)</b>	No data available	
<b>Upper explosion limit</b>	Mixture has not been tested	
<b>Lower explosion limit</b>	Mixture has not been tested	
<b>Vapour Pressure</b>	Mixture has not been tested	
<b>Relative density</b>	Mixture has not been tested	
<b>Specific gravity</b>	No data available	
<b>Solubility</b>	No data available	
<b>Partition coefficient: n-octanol/water</b>	No data available	
<b>Explosive properties</b>	Mixture has not been tested	
<b>OTHER INFORMATION</b>	No data available	

## SECTION 10: Stability and reactivity

<b>Reactivity</b>	None known.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous reaction has not been reported.
<b>Conditions to Avoid</b>	No information available.
<b>Incompatible Materials</b>	No dangerous reaction known under conditions of normal use.
<b>Hazardous decomposition products</b>	No data available.

## SECTION 11: Toxicological information

### Information on toxicological effects

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
Silver nitrate	= 1173 mg/kg (Rat)	No data available	No data available

### Principal Routes of Exposure, Potential health effects

<b>Irritation</b>	Conclusive but not sufficient for classification
<b>Corrosivity</b>	Conclusive but not sufficient for classification
<b>Sensitisation</b>	Conclusive but not sufficient for classification
<b>STOT - Single Exposure</b>	Conclusive but not sufficient for classification
<b>STOT - Repeated Exposure</b>	Conclusive but not sufficient for classification
<b>Carcinogenicity</b>	Conclusive but not sufficient for classification
<b>Mutagenicity</b>	Conclusive but not sufficient for classification
<b>Reproductive toxicity</b>	Conclusive but not sufficient for classification
<b>Aspiration Hazard</b>	Conclusive but not sufficient for classification

## SECTION 12: Ecological information

### Toxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
Silver nitrate	No data available	Daphnia magna EC500.0008 - 0.0011 mg/L (48 h) Daphnia magna EC50=0.0006 mg/L (48 h) Daphnia magna EC500.0008 - 0.001 mg/L (48 h)	No data available	No data available	No data available

**Persistence and degradability** No information available.

**Bioaccumulative potential** No information available.

### Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Other adverse effects** No information available.

## SECTION 13: Disposal considerations

### Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance with approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

SECTION 14: Transport information

**IATA / ADR / DOT-US / IMDG**

Not regulated in the meaning of transport regulations.

**UN Number** Not Applicable

**UN proper shipping name** Not applicable

**Transport hazard class(es)** Not Applicable

**Packing group** Not applicable

**Environmental Hazards** Not applicable

**Special precautions for user** Not applicable

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable.



## SECTION 15: Regulatory information

**Safety, health and environmental regulations/legislation specific for the substance or mixture****Substances of Very High Concern**

None.

**Restricted substances under EC 1907/2006, Annex XVII**

None.

**Substances listed under Annex I of Regulation (EC) No 689/2008**

None.

**Restricted substances under Annex V of Regulation (EC) No 689/2008**

None.

**Substances under Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC**

None.

**German Water hazard classes (Wassergefährdungsklassen)**

Chemical Name	Weight percent	Germany - Water Classification (VwVwS) - Annex 1	Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes	Germany - Water Classification (VwVwS) - Annex 3
Silver nitrate	<0.25		hazard class 3 - severe hazard to waters	

**Other International Inventories**

Chemical Name	EINECS (European Union)	ELINCS (European List of Notified Chemical Substances)	ENCS (Japan)	PICCS (Philippines)
Silver nitrate	Listed	-	Listed	Listed

Chemical Name	AICS (Australia)	South Korea (KECL)	Canada (DSL)	NDSL
Silver nitrate	Listed	Listed	Listed	-

**Chemical Safety Assessment**

No Chemical safety assessment has been carried out.

## SECTION 16: Other information

**Reason for revision** Update according to Commission Regulation (EU) No 453/2010.  
**Revision number** 2  
**Revision date** 30-May-2017

### References

- ECHA: <http://echa.europa.eu/>
- TOXNET: <http://toxnet.nlm.nih.gov/>
- eChemPortal: <http://www.echemportal.org/>
- LOLI database: <https://www.chemadvisor.com/loli-database>

### Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Acute aquatic toxicity Category 1

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"