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#### Silver nitrate solution 0,01 mol/l - 0,01 N, volumetric standard solution

article number: **6838** Version: **3.0 en** Replaces version of: 2017-02-10 Version: (2)

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

#### 1.1 Product identifier

Identification of the substance

Article number

6838

Registration number (REACH)

not relevant (mixture)

metric standard solution

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

Relevant identified uses:

Uses advised against:

Laboratory chemical Laboratory and analytical use

Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household).

Silver nitrate solution 0,01 mol/l - 0,01 N, volu-

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

Carl Roth GmbH + Co KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

**Telephone:**+49 (0) 721 - 56 06 0 **Telefax:** +49 (0) 721 - 56 06 149 **e-mail:** sicherheit@carlroth.de **Website:** www.carlroth.de

Competent person responsible for the safety data :Department Health, Safety and Environment sheet:

#### e-mail (competent person):

#### sicherheit@carlroth.de

#### 1.4 Emergency telephone number

Name	Street	Postal code/city	Telephone	Website
National Poisons Information Service City Hospital	Dudley Rd	B187QH Birmingham	844 892 0111	

### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008 (CLP)

Section	Hazard class	Cat- egory	Hazard class and category	Hazard statement
4.1C	Hazardous to the aquatic environment - chronic hazard	2	Aquatic Chronic 2	H411

For full text of abbreviations: see SECTION 16

# The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

according to Regulation (EC) No. 1907/2006 (REACH)



#### Silver nitrate solution 0,01 mol/l - 0,01 N, volumetric standard solution

#### ما ما . 2.2

Label elements	s rding to Regulation (EC) No 1272/2008 (CLP)
Signal word	Not required
Pictograms	
GHS09	¥
Hazard statem	ents
H411	Toxic to aquatic life with long lasting effects

### **Precautionary statements - prevention**

P273 Avoid release to the environment

#### **Precautionary statements - response**

P391 Collect spillage

#### **Precautionary statements - disposal**

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

#### Labelling of packages where the contents do not exceed 125 ml

Signal word: Not required.

Symbol(s)



#### 2.3 **Other hazards**

#### **Results of PBT and vPvB assessment**

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

### **SECTION 3: Composition/information on ingredients**

3.1 **Substances** 

not relevant (mixture)

3.2 **Mixtures** 

**Description of the mixture** 

according to Regulation (EC) No. 1907/2006 (REACH)



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Name of sub- stance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
Silver nitrate	CAS No 7761-88-8 EC No 231-853-9 Index No 047-001-00-2	< 0,25	Ox. Sol. 2 / H272 Met. Corr. 1 / H290 Skin Corr. 1B / H314 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410		GHS-HC

#### Notes

GHS-HC: Harmonised classification (the classification of the substance corresponds to the entry in the list according to 1272/ 2008/EC, Annex VI)

Name of sub- stance	Identifier	Specific Conc. Limits	M-Factors	ATE	Exposure route
Silver nitrate	CAS No 7761-88-8 EC No 231-853-9 Index No 047-001-00-2	-	M-factor (acute) = 100.0 M-factor (chronic) = 100.0	-	

For full text of abbreviations: see SECTION 16

### **SECTION 4: First aid measures**

#### 4.1 **Description of first aid measures**



#### **General notes**

Take off contaminated clothing.

#### **Following inhalation**

Provide fresh air.

#### Following skin contact

Rinse skin with water/shower.

#### Following eye contact

Rinse cautiously with water for several minutes.

#### **Following ingestion**

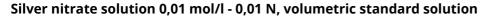
Rinse mouth. Call a doctor if you feel unwell.

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

Symptoms and effects are not known to date.

#### 4.3 Indication of any immediate medical attention and special treatment needed none

according to Regulation (EC) No. 1907/2006 (REACH)



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### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media



#### Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings water spray, alcohol resistant foam, dry extinguishing powder, BC-powder, carbon dioxide (CO<sub>2</sub>)

#### Unsuitable extinguishing media

water jet

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

Non-combustible.

#### Hazardous combustion products

In case of fire may be liberated: Nitrogen oxides (NOx)

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Do not allow firefighting water to enter drains or water courses. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

### SECTION 6: Accidental release measures

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



#### For non-emergency personnel

Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

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

#### Advice on how to contain a spill

Covering of drains.

#### Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

#### Other information relating to spills and releases

Place in appropriate containers for disposal.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.



according to Regulation (EC) No. 1907/2006 (REACH)

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### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

No special measures are necessary.

#### Measures to protect the environment

Avoid release to the environment.

#### Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed.

### Incompatible substances or mixtures

Observe hints for combined storage.

#### Consideration of other advice:

#### Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25 °C

#### 7.3 Specific end use(s)

No information available.

### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

#### **National limit values**

#### **Occupational exposure limit values (Workplace Exposure Limits)**

This information is not available.

Relevant DNELs	of compone	ents of th	e mixture			
Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time
Silver nitrate	7761-88-8	DNEL	0,016 mg/ m <sup>3</sup>	human, inhalat- ory	worker (industry)	chronic - systemic effects

### **Relevant PNECs of components of the mixture**

	•					
Name of sub- stance	CAS No	End- point	Threshol d level	Organism	Environmental compartment	Exposure time
Silver nitrate	7761-88-8	PNEC	0,04 <sup>µg</sup> / <sub>l</sub>	aquatic organ- isms	freshwater	short-term (single instance)
Silver nitrate	7761-88-8	PNEC	0,86 <sup>µg</sup> /l	aquatic organ- isms	marine water	short-term (single instance)
Silver nitrate	7761-88-8	PNEC	0,025 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	sewage treatment plant (STP)	short-term (single instance)
Silver nitrate	7761-88-8	PNEC	438,1 <sup>mg</sup> / <sub>kg</sub>	aquatic organ- isms	freshwater sedi- ment	short-term (single instance)
Silver nitrate	7761-88-8	PNEC	438,1 <sup>mg</sup> / <sup>kg</sup>	aquatic organ- isms	marine sediment	short-term (single instance)



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Relevant PNECs	of compone	ents of th	e mixture			
Name of sub- stance	CAS No	End- point	Threshol d level	Organism	Environmental compartment	Exposure time
Silver nitrate	7761-88-8	PNEC	1,41 <sup>mg</sup> / <sub>kg</sub>	terrestrial organ- isms	soil	short-term (single instance)

#### 8.2 Exposure controls

#### Individual protection measures (personal protective equipment)

#### Eye/face protection



Use safety goggle with side protection.

#### Skin protection



#### hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a consider-able reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

#### • type of material

NBR (Nitrile rubber)

#### material thickness

>0,11 mm

#### • breakthrough times of the glove material

>480 minutes (permeation: level 6)

#### other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

#### **Respiratory protection**



Respiratory protection necessary at: Aerosol or mist formation.

#### **Environmental exposure controls**

Keep away from drains, surface and ground water.

according to Regulation (EC) No. 1907/2006 (REACH)

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## SECTION 9: Physical and chemical properties

9.1	Information on basic physical and chemical pro	operties
	Physical state	liquid
	Colour	colourless
	Odour	odourless
	Melting point/freezing point	0 °C
	Boiling point or initial boiling point and boiling range	100 °C
	Flammability	non-combustible
	Lower and upper explosion limit	not determined
	Flash point	not determined
	Auto-ignition temperature	not determined
	Decomposition temperature	not relevant
	pH (value)	not determined
	Kinematic viscosity	not determined
	Solubility(ioc)	
	Solubility(ies)	missible in any propertion
	Water solubility	miscible in any proportion
	Partition coefficient	
	Partition coefficient n-octanol/water (log value):	not relevant (inorganic)
	Vapour pressure	23 hPa at 20 °C
	Density and/or relative density	
	Density	1 <sup>g</sup> / <sub>cm³</sub> at 20 °C
	Relative vapour density	information on this property is not available
	Particle characteristics	not relevant (liquid)
	Other safety parameters	
	Oxidising properties	none
9.2	Other information	
	Information with regard to physical hazard	hazard classes acc. to GHS
	classes:	(physical hazards): not relevant
	Other safety characteristics:	
	Miscibility	completely miscible with water



according to Regulation (EC) No. 1907/2006 (REACH)



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### **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

This material is not reactive under normal ambient conditions.

#### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 Possibility of hazardous reactions

Violent reaction with: strong oxidiser

#### 10.4 Conditions to avoid

Direct light irradiation.

10.5 Incompatible materials

There is no additional information.

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

Hazardous combustion products: see section 5.

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

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

Test data are not available for the complete mixture.

#### **Classification procedure**

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### Classification according to GHS (1272/2008/EC, CLP)

#### Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity of componen	ts of the mixture	2			
Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Silver nitrate	7761-88-8	oral	LD50	>2.000 <sup>mg</sup> / <sub>kg</sub>	rat
Silver nitrate	7761-88-8	dermal	LD50	>2.000 <sup>mg</sup> / <sub>kg</sub>	rat

#### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

#### Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

#### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

#### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

#### Carcinogenicity

Shall not be classified as carcinogenic.

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#### **Reproductive toxicity**

Shall not be classified as a reproductive toxicant.

#### Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

#### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

#### Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

#### Symptoms related to the physical, chemical and toxicological characteristics

#### • If swallowed

Data are not available.

#### • If in eyes

Data are not available.

#### • If inhaled

Data are not available.

#### • If on skin

Data are not available.

#### Other information

Health effects are not known.

# **11.2 Endocrine disrupting properties** None of the ingredients are listed.

#### 11.3 Information on other hazards

There is no additional information.

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

#### 12.1 Toxicity

Toxic to aquatic life with long lasting effects.

Name of sub- stance	CAS No	Endpoint	Value	Species	Exposur time
Silver nitrate	7761-88-8	LC50	1,2 <sup>µg</sup> / <sub>l</sub>	fish	96 h

	, 1				
Name of sub- stance	CAS No	Endpoint	Value	Species	Exposure time
Silver nitrate	7761-88-8	EC50	0,8 <sup>µg</sup> /I	aquatic invertebrates	7 d

#### Biodegradation

The methods for determining the biological degradability are not applicable to inorganic substances.



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#### 12.2 Process of degradability

Data are not available.

#### 12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potent	ial of componen	ts of the mixt	ure	
Name of substance	CAS No	BCF	Log KOW	BOD5/COD
Silver nitrate	7761-88-8	70		

#### 12.4 Mobility in soil

Data are not available.

- **12.5 Results of PBT and vPvB assessment** Data are not available.
- 12.6 Endocrine disrupting properties

None of the ingredients are listed.

#### 12.7 Other adverse effects

Data are not available.

### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

#### Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used.

#### 13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Waste catalogue ordinance (Germany).

#### 13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

according to Regulation (EC) No. 1907/2006 (REACH)

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SEC	TION 14: Transport information	
14.1	UN number or ID number	
	ADRRID	UN 3082
	IMDG-Code	UN 3082
	ICAO-TI	UN 3082
14.2	UN proper shipping name	
	ADRRID	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LI- QUID, N.O.S.
	IMDG-Code	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LI- QUID, N.O.S.
	ICAO-TI	Environmentally hazardous substance, liquid, n.o.s.
	Technical name (hazardous ingredients)	Silver nitrate
14.3	Transport hazard class(es)	
	ADRRID	9
	IMDG-Code	9
	ICAO-TI	9
14.4	Packing group	
	ADRRID	III
	IMDG-Code	III
	ICAO-TI	III
14.5	Environmental hazards	hazardous to the aquatic environment
	Environmentally hazardous substance (aquatic environment):	Silver nitrate
14.6	Special precautions for user	
	Provisions for dangerous goods (ADR) should be o	complied within the premises.
14.7	Maritime transport in bulk according to IMO ir	nstruments
	The cargo is not intended to be carried in bulk.	
14.8	Information for each of the UN Model Regulati	ions
	Transport of dangerous goods by road, rail and information	l inland waterway (ADR/RID/ADN) - Additional
	Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LI- QUID, N.O.S.
	Particulars in the transport document	UN3082, ENVIRONMENTALLY HAZARDOUS SUB- STANCE, LIQUID, N.O.S., (Silver nitrate, solution), 9, III, (-)

M6



according to Regulation (EC) No. 1907/2006 (REACH)



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Environmental hazards	<b>Yes</b> (hazardous to the aquatic environment)
Special provisions (SP)	274, 335, 375, 601
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
Transport category (TC)	3
Tunnel restriction code (TRC)	-
Hazard identification No	90
Emergency Action Code	3Z
Regulations concerning the International ( information	Carriage of Dangerous Goods by Rail (RID)Additional
Classification code	9
Danger label(s)	9 Fish and tree
Environmental hazards	Yes Hazardous to water
Special provisions (SP)	274, 335, 375, 601
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
Transport category (TC)	3
Hazard identification No	90
International Maritime Dangerous Goods (	Code (IMDG) - Additional information
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LI QUID, N.O.S.
Particulars in the shipper's declaration	UN3082, ENVIRONMENTALLY HAZARDOUS SUB- STANCE, LIQUID, N.O.S., (Silver nitrate, solution), 9, III
Marine pollutant	<b>Yes</b> (hazardous to the aquatic environment), (Silver nitrate)
Danger label(s)	9, "Fish and tree"
Special provisions (SP)	274, 335, 969
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-A, S-F
EIIIS	

according to Regulation (EC) No. 1907/2006 (REACH)



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#### International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

_	
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
Particulars in the shipper's declaration	UN3082, Environmentally hazardous substance, liquid, n.o.s., (Silver nitrate, solution), 9, III
Environmental hazards	<b>Yes</b> (hazardous to the aquatic environment)
Danger label(s)	9, "Fish and tree"
Special provisions (SP)	A97, A158, A197
Excepted quantities (EQ)	E1
Limited quantities (LQ)	30 kg

### SECTION 15: Regulatory information

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

**Relevant provisions of the European Union (EU)** 

#### **Restrictions according to REACH, Annex XVII**

none of the ingredients are listed

ingerous substances with	restrictions (REACH, Annex XVII)			
Name of substance	Name acc. to inventory	CAS No	Restriction	No
Silver nitrate solution	this product meets the criteria for classification in accordance with Reg- ulation No 1272/2008/EC		R3	3

Legend

R3

1 Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,

- tricks and jokes,

games for one or more participants, or any article intended to be used as such, even with ornamental aspects,

2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume,

or both. if they

can be used as fuel in decorative oil lamps for supply to the general public, and
 present an aspiration hazard and are labelled with H304.

4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation

(CEN). 5. Without prejudice to the implementation of other Union provisions relating to the classification, labelling and pack-aging of substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met

(a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil

or even sucking the wick of lamps – may lead to life-threatening lung damage";
(b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter fluid may lead to life threatening lung damage';
(c) lamps oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.';

List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list

None of the ingredients are listed.

according to Regulation (EC) No. 1907/2006 (REACH)



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Seveso	o Directive			
2012/	18/EU (Seveso III)			
Νο	Dangerous substance/hazard categories		(tonnes) for the ap- and upper-tier re- ments	Notes
E2	environmental hazards (hazardous to the aquatic en- vironment, cat. 2)	200	500	57)

Notation

57) Hazardous to the Aquatic Environment in category Chronic 2

#### **Deco-Paint Directive**

VOC content	0 % -0 <sup>g</sup> / <sub>1</sub>
-------------	---------------------------------------

#### Industrial Emissions Directive (IED)

VOC content	0 %
VOC content (Water content was discounted)	-0 <sup>g</sup> /l

# Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

none of the ingredients are listed

# Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

none of the ingredients are listed

#### Water Framework Directive (WFD)

List of pollutants (WFD)				
Name of substance	Name acc. to inventory	CAS No	Listed in	Remarks
Silver nitrate	Substances which contribute to eutrophication (in particular, ni- trates and phosphates)		a)	
Silver nitrate	Metals and their compounds		a)	

Legend

A) Indicative list of the main pollutants

#### Regulation on the marketing and use of explosives precursors

none of the ingredients are listed

**Regulation on drug precursors** 

none of the ingredients are listed

#### Regulation on substances that deplete the ozone layer (ODS)

none of the ingredients are listed

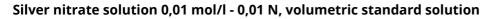
#### Regulation concerning the export and import of hazardous chemicals (PIC)

none of the ingredients are listed

#### Regulation on persistent organic pollutants (POP)

none of the ingredients are listed

according to Regulation (EC) No. 1907/2006 (REACH)



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#### **Other information**

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

#### **National inventories**

Country	Inventory	Status
AU	AICS	all ingredients are listed
CA	DSL	all ingredients are listed
CN	IECSC	all ingredients are listed
EU	ECSI	all ingredients are listed
EU	REACH Reg.	all ingredients are listed
JP	CSCL-ENCS	all ingredients are listed
KR	KECI	all ingredients are listed
MX	INSQ	all ingredients are listed
NZ	NZIoC	all ingredients are listed
PH	PICCS	all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	all ingredients are listed
US	TSCA	all ingredients are listed

#### Legend

AICS CICR	Australian Inventory of Chemical Substances Chemical Inventory and Control Regulation
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
KECI	Korea Existing Chemicals Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
	REACH registered substances
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

#### 15.2 Chemical Safety Assessment

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

### **SECTION 16: Other information**

#### Indication of changes (revised safety data sheet)

Alignment to regulation: Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

Restructuring: section 9, section 14



according to Regulation (EC) No. 1907/2006 (REACH)



### Silver nitrate solution 0,01 mol/l - 0,01 N, volumetric standard solution

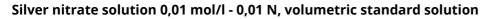
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Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.1		Classification according to Regulation (EC) No 1272/2008 (CLP): change in the listing (table)	yes
2.1	Remarks: For full text of Hazard- and EU Hazard-state- ments: see SECTION 16.		yes
2.1		The most important adverse physicochemical, human health and environmental effects: Spillage and fire water can cause pollution of watercourses.	yes
2.2		Pictograms: change in the listing (table)	yes
2.3	Other hazards: There is no additional information.	Other hazards	yes
2.3		Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.	yes

### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations	
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de naviga- tion intérieures (European Agreement concerning the International Carriage of Dangerous Goods by In- land Waterways)	
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concern- ing the International Carriage of Dangerous Goods by Road)	
Aquatic Acute	Hazardous to the aquatic environment - acute hazard	
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BOD	Biochemical Oxygen Demand	
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)	
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures	
COD	Chemical oxygen demand	
DGR	Dangerous Goods Regulations (see IATA/DGR)	
DNEL	Derived No-Effect Level	
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval	
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identi- fier of substances commercially available within the EU (European Union)	
EINECS	European Inventory of Existing Commercial Chemical Substances	
ELINCS	European List of Notified Chemical Substances	
EmS	Emergency Schedule	
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Na- tions	

according to Regulation (EC) No. 1907/2006 (REACH)



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Abbr.	Descriptions of used abbreviations	
IATA	International Air Transport Association	
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)	
ICAO	International Civil Aviation Organization	
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air	
IMDG	International Maritime Dangerous Goods Code	
IMDG-Code	International Maritime Dangerous Goods Code	
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008	
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval	
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval	
log KOW	n-Octanol/water	
Met. Corr.	Substance or mixture corrosive to metals	
M-factor	Means a multiplying factor. It is applied to the concentration of a substance classified as hazardous to the aquatic environment acute category 1 or chronic category 1, and is used to derive by the summation method the classification of a mixture in which the substance is present	
NLP	No-Longer Polymer	
Ox. Sol.	Oxidising solid	
PBT	Persistent, Bioaccumulative and Toxic	
PNEC	Predicted No-Effect Concentration	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals	
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula- tions concerning the International carriage of Dangerous goods by Rail)	
Skin Corr.	Corrosive to skin	
Skin Irrit.	Irritant to skin	
SVHC	Substance of Very High Concern	
VOC	Volatile Organic Compounds	
vPvB	Very Persistent and very Bioaccumulative	

#### Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

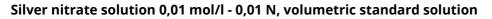
Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### **Classification procedure**

Physical and chemical properties. The classification is based on tested mixture. Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).



according to Regulation (EC) No. 1907/2006 (REACH)



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#### List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text	
H272	May intensify fire; oxidiser.	
H290	May be corrosive to metals.	
H314	Causes severe skin burns and eye damage.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	
H411	Toxic to aquatic life with long lasting effects.	

#### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

