

Trade name: Argenti nitras

Substance number: 061464

Version: 4 / CH

Date revised: 30.04.2019

Replaces Version: 3 / CH

Print date: 30.04.19

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

1.1. Product identifier

Argenti nitras

Item No. 06146400

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

Use of the substance/preparation

Manufacture of pharmaceutical products, Chemical

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

Hänseler AG

Industriestrasse 35

9100 Herisau

Telephone no. 0041 (0)71 353 58 58

E-mail address of sdb@haenseler.ch

person responsible

for this SDS

1.4. Emergency telephone number

Switzerland :145 / Abroad +41 (0)44 251 51 51

SECTION 2: Hazards identification ***

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)

Ox. Sol. 2 H272

Skin Corr. 1B H314

Eye Dam. 1 H318

Aquatic Acute 1 H400

Aquatic Chronic 1 H410

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008

For explanation of abbreviations see section 16.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms ***



Signal word

Danger

Hazard statements ***

H272

May intensify fire; oxidizer.

H314

Causes severe skin burns and eye damage.

H410

Very toxic to aquatic life with long lasting effects.

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Precautionary statements ***

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P221	Take any precaution to avoid mixing with combustibles...
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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 or doctor.

Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

contains *** Silver nitrate

SECTION 3: Composition/information on ingredients *****Hazardous ingredients *******Silver nitrate**

CAS No.	7761-88-8		
EINECS no.	231-853-9		
Concentration	>= 58		%
Classification (Regulation (EC) No. 1272/2008)			
	Ox. Sol. 2		H272
	Skin Corr. 1B		H314
	Aquatic Acute 1		H400
	Aquatic Chronic 1		H410

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

Remove contaminated, soaked clothing immediately and dispose of safely.

After inhalation

Ensure supply of fresh air. In the event of symptoms take medical treatment.

After skin contact

After contact with skin, wash immediately with plenty of water. Remove contaminated, soaked clothing immediately and dispose of safely. Summon a doctor immediately.

After eye contact

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Summon a doctor immediately.

After ingestion

Do not induce vomiting. Drink water in small gulps. Call in a physician immediately and show him the Safety Data Sheet. No trials on neutralisation.

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

Coughing, Chemical burn, Shortness of breath, Dizziness, Unconsciousness, Diarrhoea, Vomiting, Death, Causes very strong irritations of the eyes, skin and mucous membranes. Danger of blindness. Gastrointestinal complaints

SECTION 5: Firefighting measures**5.1. Extinguishing media**

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Suitable extinguishing media

Extinguishing measures to suit surroundings

5.2. Special hazards arising from the substance or mixtureThe product is not combustible. The product supports fire. If a fire breaks out nearby evolution of dangerous gases possible. In the event of fire the following can be released: Nitrogen oxides (NO_x)**5.3. Advice for firefighters****Special protective equipment for fire-fighting**

Use self-contained breathing apparatus. Wear protective clothing.

Other information

Do not discharge into surface waters/groundwater. Suppress vapours with water spray jet.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Do not inhale dust. Avoid contact with organic compounds. Avoid dust formation. Ensure adequate ventilation.

6.2. Environmental precautions

Do not empty into drains.

6.3. Methods and material for containment and cleaning up

Pick up mechanically. When picked up, treat material as prescribed under Section 13 "Disposal". Send in suitable containers for recovery or disposal. Avoid raising dust. To pick up dry. Clean up affected area.

6.4. Reference to other sections

Information regarding waste disposal, see Section 13.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Observe safety references and application instructions mentioned on can.

Advice on protection against fire and explosion

Containers in danger should be cooled with water. Oxidizing

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed and dry.

Hints on storage assembly

Do not store with combustible materials.

Storage classes

Storage class according to TRGS 510

5.1B

Oxidising hazardous substances

Storage category (Switzerland)

5

Oxidizing substances, organic peroxides

Further information on storage conditions

Protect from light. Keep away from sources of ignition. Protect from warmth.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure limit values**

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Silver nitrate

List	SUVA		
Type	MAK		
Value	0,01	mg/m ³	
Short term exposure limit	0,02	mg/m ³	
Status: 2017;	Remarks: HautKT HU; NIOSH, OSHA		

8.2. Exposure controls**General protective and hygiene measures**

Preventative skin protection. Store work clothing separately. At work do not eat, drink, smoke or take drugs. Wash hands before breaks and after work. Avoid contact with skin. Observe the usual precautions for handling chemicals.

Respiratory protection

Breathing apparatus in the event of aerosol. Short term: filter apparatus, Filter P3; Provide good ventilation of working area (local exhaust ventilation if necessary).

Hand protection

Protective gloves			
Use	Permanent hand contact		
Appropriate Material	nitrile rubber - NBR		
Material thickness	0.11	mm	
Breakthrough time	> 480	min	
Protective gloves			
Use	Short-term hand contact		
Appropriate Material	nitrile rubber - NBR		
Material thickness	0.11	mm	
Breakthrough time	> 480	min	

Eye protection

Tightly fitting safety glasses

Body protection

protective overalls

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

Form	crystalline		
Colour	colourless		
Odour	odourless		
pH value			
Value	5.4	to	6.4
Concentration/H ₂ O	100	g/l	
Temperature	20	°C	
Remarks	Aqueous extract		
Melting point			
Value	appr. 212		°C
Initial boiling point and boiling range			
Value	444		°C
Flash point			
Remarks	Not applicable		
Flammability (solid, gas)			
	not determined		

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Density

Value	appr.	4.35			g/cm ³
Temperature		20	°C		

Solubility in water

Value	appr.		to	2160	g/l
Temperature		20	°C		
Value	appr.		to	10240	g/l
Temperature		100	°C		

Decomposition temperature

Value	>=	444		°C
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Oxidising properties

Remarks	Oxidizing
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9.2. Other information**Bulk density**

Value	appr.	2350		kg/m ³
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SECTION 10: Stability and reactivity**10.4. Conditions to avoid**

To avoid thermal decomposition, do not overheat. Protect from light.

10.5. Incompatible materials

Reactions with alcohols. Ammonia, Avoid contact with oxidizing substances. combustible substances, Nitrites, Acids, Magnesium, Reactions with halogenated compounds. Halogens, Aluminium

10.6. Hazardous decomposition products

Nitrous gases

SECTION 11: Toxicological information *****11.1. Information on toxicological effects****Acute oral toxicity**

A TE	1'173	mg/kg
Method	calculated value (Regulation (EC) No. 1272/2008)	

Acute oral toxicity (Components)**Silver nitrate**

Species	rat	
LD50	1173	mg/kg
Remarks	Ingestion causes burns of the upper digestive and respiratory tracts.	

Skin corrosion/irritation (Components)**Silver nitrate**

evaluation	corrosive
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Serious eye damage/irritation (Components)**Silver nitrate**

evaluation	corrosive
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Mutagenicity

Reference substance	Silver nitrate
Species	Salmonella typhimurium
Method	Ames test
Remarks	negative

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Source	Literature value
Reference substance	Silver nitrate
Species	Escherichia coli
Method	Ames test
Remarks	negative
Source	Literature value

Experience in practice

Irritates the mucous membrane. Causes burns. diarrhea. vomiting

Other information

Observe the usual precautions for handling chemicals.

SECTION 12: Ecological information *****12.1. Toxicity****Fish toxicity (Components)****Silver nitrate**

Species	golden orfe (<i>Leuciscus idus</i>)	
LC50	0.029	mg/l
Duration of exposure	96	h
Method	OECD 203	

Silver nitrate

Species	rainbow trout (<i>Oncorhynchus mykiss</i>)	
LC50	0.006	mg/l
Duration of exposure	96	h

Daphnia toxicity (Components)**Silver nitrate**

Species	Daphnia magna	
EC50	0.002	mg/l
Duration of exposure	48	h

Algae toxicity (Components)**Silver nitrate**

Species	Desmodesmus subspicatus	
IC50	0.002	mg/l
Duration of exposure	8	d

Bacteria toxicity (Components)**Silver nitrate**

Species	Pseudomonas putida	
EC10	0.006	mg/l
Duration of exposure	16	h

12.6. Other adverse effects**General information / ecology**

Harmful to aquatic organisms. Do not allow it to reach soil, ground water, water bodies or sewage system.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations for the product**

Disposal in compliance with local and national regulations.

Disposal recommendations for packaging

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Dispose of as unused product.

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
Tunnel restriction code	E		
14.1. UN number	1493	1493	1493
14.2. UN proper shipping name	SILVER NITRATE	SILVER NITRATE	SILVER NITRATE
14.3. Transport hazard class(es)	5.1	5.1	5.1
Label			
14.4. Packing group	II	II	II
Limited Quantity	1 kg		
Transport category	2		
14.5. Environmental hazards	 ENVIRONMENTALLY HAZARDOUS	Marine Pollutant 	 ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information *****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Water Hazard Class (Germany) *****

Water Hazard Class WGK 3

(Germany)

Remarks

Derivation of WGK according to Annex 1 No. 5.2 AwSV

SECTION 16: Other information**Hazard statements listed in Chapter 3**

H272 May intensify fire; oxidizer.
H314 Causes severe skin burns and eye damage.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

CLP categories listed in Chapter 3

Aquatic Acute 1 Hazardous to the aquatic environment, acute, Category 1
Aquatic Chronic 1 Hazardous to the aquatic environment, chronic, Category 1

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Ox. Sol. 2
Skin Corr. 1B

Oxidising solid, Category 2
Skin corrosion, Category 1B

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: ***
This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.