acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: January 07, 2019

Revision: January 04, 2019

Identification		
Product identifier		
 Trade name: <u>Silver Nitrate</u>, Product code: SN3340SS 	<u>, 0.0141N</u>	
 Recommended use and read Recommended use: Laboration Restrictions on use: No rel 	atory chemicals	
Details of the supplier o Manufacturer/Supplier: AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 Phone: (717)632-1291 Toll-Free: (866)632-1291 info@aquaphoenixsci.com	f the Safety Data Sheet	
 Emergency telephone num ChemTel Inc. 	iber:	
(800)255-3924 (North Amer +1 (813)248-0585 (Internatio		
(800)255-3924 (North Amer +1 (813)248-0585 (Internatio	pnal)	
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(800)255-3924 (North Amer +1 (813)248-0585 (Internation 2 Hazard(s) identification 2 Hazard(s) identification 3 Classification of the sub The product is not classified 3 Label elements The product is not classified 3 GHS label elements None. 4 Hazard pictograms: None. 5 Signal word: None 4 Hazard statements: None.	n onal) ostance or mixture as hazardous according to the Globally as hazardous according to OSHA GHS	
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(800)255-3924 (North Amer +1 (813)248-0585 (Internation 2 Hazard(s) identification 2 Hazard(s) identification 3 Classification of the sub 3 The product is not classified 3 Label elements 3 The product is not classified 4 GHS label elements None. 5 Hazard pictograms: None. 6 Hazard statements: None. 7 Precautionary statements: 9 Other hazards There are not	n ostance or mixture as hazardous according to the Globally as hazardous according to OSHA GHS None.	regulations within the United States
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 7761-88-8
 silver nitrate

 Ox. Sol. 2, H272

 Met. Corr.1, H290; Skin Corr. 1B, H314; Eye Dam. 1, H318

 Additional information: For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

[•] Description of first aid measures

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· General information: No special measures required.

• After inhalation: Supply fresh air; consult doctor in case of complaints.

• After skin contact:

Immediately rinse with water.

If skin irritation is experienced, consult a doctor.

· After eye contact: Remove contact lenses if worn.

• After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

Most important symptoms and effects, both acute and delayed:

Gastric or intestinal disorders when ingested.

- · Danger: No relevant information available.
- Indication of any immediate medical attention and special treatment needed:

If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

Extinguishing media

• Suitable extinguishing agents: Use fire fighting measures that suit the environment.

- For safety reasons unsuitable extinguishing agents: No relevant information available.
- · Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

Advice for firefighters

· Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

• Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation.

For large spills, wear protective clothing.

• Environmental precautions Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up

Use limestone to neutralize and/or absorb spill.

Dispose of the collected material according to regulations.

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.

7 Handling and storage

[·] Handling

Precautions for safe handling:

Prevent formation of aerosols.

Avoid splashes or spray in enclosed areas.

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· Information about protection against explosions and fires: No special measures required.

• Conditions for safe storage, including any incompatibilities

 \cdot Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Avoid storage near extreme heat.

Due to photo-sensitivity, store product in brown-glass receptacles.

Unsuitable material for receptacle: aluminium.

Unsuitable material for receptacle: steel.

· Information about storage in one common storage facility:

Store away from oxidizers, strong acids, strong bases.

Store away from metals.

Store away from foodstuffs.

• Further information about storage conditions: Keep containers tightly sealed.

· Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

[·] Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

[•] Exposure controls

· General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

- Engineering controls: No relevant information available.
- Breathing equipment: Not required under normal conditions of use.
- · Protection of hands: Rubber gloves
- · Material of gloves

Nitrile rubber, NBR

Butyl rubber, BR

Neoprene gloves

Natural rubber, NR

Sensibilization by the components in the glove materials is possible.

Eye protection:



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

· Body protection: Protective work clothing

· Limitation and supervision of exposure into the environment No special requirements.

· Risk management measures No special requirements.

9 Physical and chemical properties

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		(Cont'd. of page
Information on basic physical a	nd chemical properties	
Appearance:		
Form:	Liquid	
Color:	Colorless	
Odor:	Odorless	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Melting point/Melting range:	Not determined.	
Boiling point/Boiling range:	100 °C (212 °F)	
Flash point:	The product is not flammable.	
Flammability (solid, gaseous):	Not applicable.	
Auto-ignition temperature:	Not determined.	
Decomposition temperature:	Not determined.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits		
Lower:	Not determined.	
Upper:	Not determined.	
Oxidizing properties:	Not determined.	
Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)	
Density at 20 °C (68 °F):	1.01 g/cm³ (8.43 lbs/gal)	
Relative density:	Not determined.	
Vapor density:	Not determined.	
Evaporation rate:	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible.	
Partition coefficient (n-octanol/wate	er): Not determined.	
Viscosity		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Other information	No relevant information available.	

10 Stability and reactivity

· Reactivity: No relevant information available.

· Chemical stability: Stable under normal temperatures and pressures.

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

[·] Possibility of hazardous reactions

Reacts with certain metals.

Reacts with strong acids and alkali.

Develops toxic gases / fumes.

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· Conditions to avoid No relevant information available.

· Incompatible materials No relevant information available.

Hazardous decomposition products

Under fire conditions only: Nitrogen oxides (NOx) Toxic metal oxide smoke Possible in traces.

11 Toxicological information

[·] Information on toxicological effects

· Acute toxicity: Based on available data, the classification criteria are not met.

- · LD/LC50 values that are relevant for classification: None.
- · Primary irritant effect:
- On the skin: Based on available data, the classification criteria are not met.
- On the eye: Based on available data, the classification criteria are not met.
- Sensitization: Based on available data, the classification criteria are not met.

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

• NTP (National Toxicology Program):

None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

Probable route(s) of exposure:

Ingestion.

Inhalation.

Eye contact.

Skin contact.

· Acute effects (acute toxicity, irritation and corrosivity): No relevant information available.

- · Repeated dose toxicity: No relevant information available.
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- 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.

12 Ecological information

[·] Toxicity

· Aquatic toxicity Toxic for aquatic organisms

- Persistence and degradability No relevant information available.
- · Bioaccumulative potential: No relevant information available.
- Mobility in soil: No relevant information available.
- Additional ecological information

· General notes:

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Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground. Toxic for aquatic organisms

Results of PBT and vPvB assessment

· **PBT:** Not applicable.

vPvB: Not applicable.

· Other adverse effects No relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

Smaller quantities can be disposed of with household waste.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

[•] Uncleaned packagings

· Recommendation: Disposal must be made according to official regulations.

· Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information	
· UN-Number · DOT, ADR/RID/ADN, IMDG, IATA	Not regulated.
 UN proper shipping name DOT, ADR/RID/ADN, IMDG, IATA 	Not regulated.
 Transport hazard class(es) 	
· DOT, ADR/RID/ADN, IMDG, IATA · Class	Not regulated.
 Packing group DOT, ADR/RID/ADN, IMDG, IATA 	Not regulated.
· Environmental hazards	Not applicable.
Special precautions for user	Not applicable.
 Transport in bulk according to Annex MARPOL73/78 and the IBC Code 	t II of Not applicable.

15 Regulatory information

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

· United States (USA)

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SARA
· Section 302 (extremely hazardous substances):
None of the ingredients are listed.
· Section 355 (extremely hazardous substances):
None of the ingredients are listed.
· Section 313 (Specific toxic chemical listings):
None of the ingredients are listed.
· TSCA (Toxic Substances Control Act)
All ingredients are listed.
· Proposition 65 (California)
· Chemicals known to cause cancer:
None of the ingredients are listed.
· Chemicals known to cause developmental toxicity for females:
None of the ingredients are listed.
· Chemicals known to cause developmental toxicity for males:
None of the ingredients are listed.
· Chemicals known to cause developmental toxicity:
None of the ingredients are listed.
· EPA (Environmental Protection Agency):
None of the ingredients are listed.
· IARC (International Agency for Research on Cancer):
None of the ingredients are listed.
· Canadian Domestic Substances List (DSL) (Substances not listed.):

All ingredients are listed.

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.

Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistant, Bio-accumulable, Toxic VPvB: very Persistent and very Bioaccumulative OSHA: Occupational Safety & Health Administration Ox. Sol. 2: Oxidizing solids – Category 2 Met. Corr. 1: Corrosive to metals – Category 1 Skin Corr. 1B: Skin corrosion/irritation – Category 1 Eye Dam. 1: Serious eye damage/eye irritation – Category 1 **Sources**

Website, European Chemicals Agency (echa.europa.eu)

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(Cont'd. of page 7) Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org) Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6 Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5. Safety Data Sheets, Individual Manufacturers SDS Prepared by:

ChemTel Inc. 1305 North Florida Avenue Tampa, Florida USA 33602-2902 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573 Website: www.chemtelinc.com