Scientific Laboratory Supplies - Safety Data Sheet CHE3228

(in accordance with regulation (EU) 2015/830 and regulation (EC) 1272/2008)

Revision: 1.1 Revision date: 16 April 2021
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Section 1. Identification

1.1 Product Identifier CHE3228

Product Name SILVER NITRATE A.R. 250g.

CAS Number 7761-88-8
REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

Molecular Formula $AgNO_3$ =169.87

1.2 Relevent identified uses of the substance or mixure & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Scientific Laboratory Supplies

Unit 6, Foresters Avenue
Fairham Business Park
Fairham
Nottingham
NG11 2AF
UNITED KINGDOM

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Fax 0115 9825275
Email sales@scientific-labs.com

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(24hr) 112
(Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

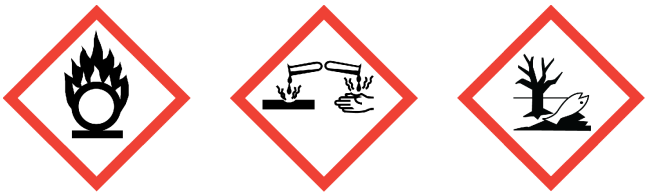
Oxidising solid, category 2	H272: May intensify fire; oxidizer.
Corrosive to metals, category 1	H290: May be corrosive to metals.
Skin corrosion/irritation, category 1B	H314: Causes severe skin burns and eye damage.
Hazard to aquatic environment, category 1	H400: Very toxic to aquatic life.
Hazard to aquatic environment, category 1	H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms



Hazard Statements	May intensify fire; oxidizer. Causes severe skin burns and eye damage. Very toxic to aquatic life with long lasting effects. May be corrosive to metals.
Precautionary Statements	Wear protective gloves / protective clothing / eye protection. Keep / Store away from clothing / combustible materials. Keep away from heat / sparks/open flames/hot surfaces - No smoking. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. Avoid release to the environment.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Silver Nitrate	7761-88-8	231-835-9		>99%	Ox. Sol. 2,Met. Corr. 1,Skin Corr. 1B,Aquatic Acute 1,Aquatic Chronic 1

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION URGENTLY.
Skin	Thoroughly wash off skin with soap and water. Remove contaminated clothing immediately and wash before re-use. Unless contact has been slight OBTAIN MEDICAL ATTENTION
Inhalation	Remove from exposure. Keep warm and at rest. In severe cases or if exposure has been great, OBTAIN MEDICAL ATTENTION.
Ingestion	If conscious wash out mouth thoroughly with water and give water or milk to drink. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

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

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed.

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Consider what other flammable materials are present and act accordingly.
Unsuitable Media	Consider what other flammable materials are present and act accordingly.

5.2 Special hazards arising from the substance or mixture

Hazards	Not flammable but will assist a fire, producing irritant and toxic fumes of oxides of nitrogen.

5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Use approved personal protective equipment.

6.2 Environmental precautions

Enviromental	Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage	Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water.
Minor Spillage	Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains dust concentrations below the recommended limits.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Protect from direct sunlight. Store in a dry place protected against moisture and water. Do not store on wooden surfaces. Store in a suitable area for oxidising agents.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term (8hr TWA)		Short Term 15min period)	
Silver Nitrate	7761-88-8	>99%	-	-	0.01 ppm	-

Exposure data source(s)	IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

Respiratory Protection	Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge respirator,
Hand Protection	Use nitrile gloves or PVC gauntlets.
Eye Protection	Use tightly fitting chemical splash proof glasses or goggles.
Skin Protection	Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.
Special Hazards	No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	White crystalline solid, becoming grey or grey/black on long exposure to light.
Odour	No specific odour.
pH	6 @ 20°C
Boiling Point	444°C
Melting Point	212°C
Flash Point	Not applicable
Upper Flammable Limit	Not applicable

Lower Flammable Limit	Not applicable
Auto Ignition	Not applicable
Explosive Properties	Not explosive as a single substance.
Oxidising Properties	A strong oxidising agent.
Vapour Pressure	Not applicable
Relative Density	4.3520
Water Solubility	Soluble in cold water and very soluble in hot water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	Do not allow to impregnate wood or other organic materials.
10.5	Incompatable Materials	Contact with ammonia may produce explosive compounds. Avoid formation of explosive silver compounds such as nitride, fulminate, oxalate and tartrate. Acetaldehyde. Acetylene and its derivatives. Ethanol. Many organic compounds.
10.6	Hazardous Decomposition Products	Not flammable but will assist a fire, producing irritant and toxic fumes of oxides of nitrogen.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Causes serious eye damage. Concentrated solutions will irritate the eyes and can cause conjunctivitis.
Skin	May cause severe burns. Causes blue/grey discolouration of the skin.
LD50 Skin	Not available
Ingestion	Ingestion will cause violent abdominal pain and vomiting.
LD50 Oral	50mg/kg Human
Inhalation	Absorbtion over a long period may cause 'Argyria' a blue/grey discolouration of various tissues.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	May be a mutagen.
Reproductive Effects	Reproductive effects have been observed in animals, no human data is available.

Section 12. Ecological

12.1	Toxicity	Very Toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment.
	LC50 Algal	0.0099mg/l Green algae (96 hours)
	LC50 Crustacea	0.00121mg/l Daphnia magna (48 hours)
	LC50 Fish	0.0012mg/l Fathead Minnow (96 hours)
12.2	Persistence and degradability	No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.
12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Do not dispose of as domestic waste. Never dispose of into water courses or sewerage systems. Dispose of in a licensed incinerator. Neutralised acid slurry can be buried in an approved land fill site.
Contaminated Packaging	Use a licensed waste disposer.

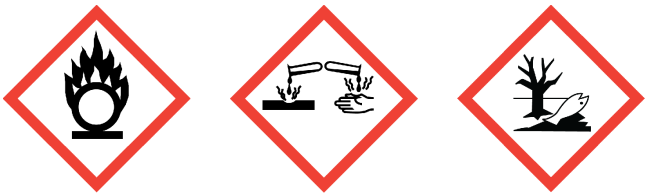
Section 14. Transport Information

14.1	**UN Number**	1493
14.2	**Proper Shipping Name**	Silver nitrate
14.3	**Transport classes**	
	UN classification	5.1
	Subsidiary hazard(s)	None
	Transport category	2
	ADR Hazard ID	50
	Tunnel Restriction Code	E
14.4	**Packing Group**	II
14.5	**Environment hazards**	See section 12.
14.6	**Special precautions for user**	No special precautions required.
14.7	**Transport in bulk**	Not transported in bulk.

Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for subtance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification	Oxidising solid, category 2; Corrosive to metals, category 1; Skin corrosion/irritation, category 1B; Hazard to aquatic environment, category 1; Hazard to aquatic environment, category 1
Signal word	Danger
Hazard Pictograms	
Hazard Statements	H272, H314, H410, H290 May intensify fire; oxidizer. Causes severe skin burns and eye damage. Very toxic to aquatic life with long lasting effects. May be corrosive to metals.
Hazard Statements (Packs of 500ml/g or less)	H272, H410, H290, H314 May intensify fire; oxidizer. Very toxic to aquatic life with long lasting effects. May be corrosive to metals. Causes severe skin burns and eye damage.
Precautionary Statements	P280, P220, P210, P303+P361+P353, P305+P351+P338, P273 Wear protective gloves / protective clothing / eye protection. Keep / Store away from clothing / combustible materials. Keep away from heat / sparks/open flames/hot surfaces - No smoking. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. Avoid release to the environment.
Precautionary Statements (Packs of 500ml/g or less)	P280, P220, P210 Wear protective gloves / protective clothing / eye protection. Keep / Store away from clothing / combustible materials. Keep away from heat / sparks/open flames/hot surfaces - No smoking.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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