Scientific Laboratory Supplies - Safety Data Sheet

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

Revision: 1.1 Revision date: 16 April 2021
Date printed: 17 August 2022

1.1 Product Identifier CHE3242

Section 1. Identification

Product Name SILVER NITRATE pure 100g.

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 Agno₃ =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

SCIENTIFIC LABORATORY SUPPLIES

Wilford Industrial Estate

Ruddington Lane

Wilford Nottingham NG11 7EP

UNITED KINGDOM

Phone 0115 9821111 Fax 0115 9825275

Email sales@scientific-labs.com

1.4 Emergency Telephone (08:00-17:00) 0115 9821111

(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 Wear protective gloves / eye protection.

aiders

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

Environmental 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

maintained chemical cartridge respirator,

Hand Protection Use nitrile gloves or PVC gauntlets.

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
pH
6 @ 20°C
Boiling Point
444°C
Melting Point
Flash Point
Upper Flammable Limit
Not applicable
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.

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

Packing Group II

14.4 Packing Group II

14.5 Environment hazards See section 12.14.6 Special precautions for No special precautions required.

user

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.

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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