

1. Identification

Product Code **CS2114-48**

Product Name **SILVER NITRATE L.R.**

Molecular Formula AgNO_3 =169.87

CAS Number 7761-88-8

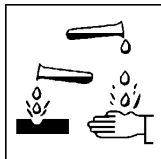
Supplier:  **BEECROFT & PARTNERS**
Northfield Road
Rotherham
South Yorkshire

Phone 01709-377881
Fax 01709-369264

Emergency Telephone 08:30-1700 01709-377881
24hr 112
(Have this document to hand)

2. Composition

Component	CAS No	EEC No	Conc w/w	Classification & Risk Phrases	Exp (See 8.1)
Silver compounds, as Silver	7761-88-8	231-835-9	> 63.0%	C N : R34,R50/53	OES

3. Hazards Identification

Causes burns. Very Toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment.

4. 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.

5. Fire Fighting Measures

Hazards Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus. Not flammable but will assist a fire, producing irritant and toxic fumes of oxides of nitrogen.

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

Unsuitable Media Nothing specified.

6. Accidental Release Measures

Personal Protection	Use approved personal protective equipment.
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.
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.

7. Storage & Handling

Handling Precautions	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.
Storage Conditions	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.

8.1 Occupational Exposure Limits

Occupational Exposure Standard	Long Term (8hr TWA):	-	ppm	0.0100	mg m-3
	Short Term (15min Period):	-	ppm	-	mg m-3

8.2 Personal Protection

Respiratory	Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge respirator,
Hands	Use nitrile gloves or PVC gauntlets.
Eyes	Use chemical splash proof glasses or goggles.
Skin	Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.

9. Physical & 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	444.0 °C
Melting point	212.0 °C
Flash point	Not available
Upper Flammable Limit	Not available
Lower Flammable Limit	Not available
Auto Ignition	Not available
Explosive properties	Not explosive as a single substance.
Oxidising Properties	A strong oxidising agent.
Vapour Pressure	No data
Relative Density	4.3520
Water Solubility	Soluble in cold water and very soluble in hot water.

10. Stability & Reactivity

Chemical Stability	Stable under normal conditions
Conditions to Avoid	Do not allow to impregnate wood or other organic materials.
Materials to Avoid	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. Stability & Reactivity (continued)

Hazardous Decomposition Products	Not flammable but will assist a fire, producing irritant and toxic fumes of oxides of nitrogen.
----------------------------------	---

11. Toxicological Information

Eyes	The solid and solutions will irritate the eyes and can cause conjunctivitis.
Skin	Causes blue/grey discolouration of the skin.
LD50 Skin	Not available
Ingest	Ingestion will cause violent abdominal pain and vomiting.
LD50 Ingest	Oral Mouse 50mg/Kg
Inhalation	Absorbtion over a long period may cause 'Argyria' a blue/grey discolouration of various tissues.
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.

12. Ecological

Threshold concentration for fresh and salt water fish is 0.01ppm as silver. The ecological threat is thought to be due to the nitrate content. Very Toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment.

13. Disposal Considerations

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.

14. Transport Information

Proper Shipping Name	Silver nitrate
UN Number	1493
UN Classification	5.1 Oxidising agent
Subsidiary Risk	None
Flash Point	Not available
Packing Group	II
Marine pollutant	No
ADR Hazard ID	50

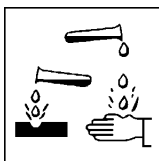


15. Regulatory Information

Labelling	Corrosive, Dangerous for the Environment.
Classification	

Label Symbols

C



N



Risk & safety Phrases	Causes burns. Very Toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment. Keep locked up and out of reach of children. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of accident or if you feel unwell, seek medical advice immediately (show the label). This material and/or its container must be disposed of as hazardous waste. Avoid release to the environment, refer to special instructions/safety data sheet.
-----------------------	---

15. Regulatory Information (continued)

EEC Number

231-835-9

16. Other Information

Document Information

This document has been prepared in accordance with directive 88/379/EEC.

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment.

Revision Date: 19/11/03.

Data reviewed and PDF file generated: 07/06/04.

Copyright 2004 Beecroft & Partners.