



# SAFETY DATA SHEET

## SILVER NITRATE

---

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY:

---

**PRODUCT NAME:** SILVER NITRATE  
**PART No.:** RM234  
**SUPPLIER:** J M Loveridge plc  
Southbrook Road, Southampton  
Hampshire  
SO15 1BH  
Tel: 023 8022 2008  
Fax: 023 8022 2117

---

### 2. COMPOSITION/INFORMATION ON INGREDIENTS:

---

**EU INDEX No.:** 047-001-00-2  
**EEC (EINECS) No.** 231-853-9  
**CAS No.:** 7761-88-8

---

### 3. HAZARDS IDENTIFICATION:

---

Causes burns. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

---

### 4. FIRST AID MEASURES:

---

**GENERAL:** IN ALL CASES OF DOUBT OR WHEN SYMPTOMS PERSIST, ALWAYS SEEK MEDICAL ATTENTION

**INHALATION:** Move affected person to fresh air. If recovery not rapid, seek medical attention.

**INGESTION:** Only when conscious, rinse mouth with plenty of water and give plenty of water to drink - (approx 500ml). DO NOT INDUCE VOMITING. In case of spontaneous vomiting, be sure that vomit can freely drain because of danger of suffocation. Keep patient at rest and obtain medical attention.

**SKIN:** Remove contaminated clothing. Wash affected area with plenty of soap and water. If irritation persists, seek medical attention. Launder clothing before re-use.

**EYES:** Keeping eye open, immediately irrigate with water or eye-wash for 15 minutes. Obtain medical attention.

---

### 5. FIRE FIGHTING MEASURES:

---

---

<b>EXTINGUISHING MEDIA:</b>	Use extinguishing media suitable against surrounding fire or the cause of fire.
<b>SPECIAL FIRE FIGHTING PROCEDURES:</b>	Take measures to retain water used for extinguishing. Do not release contaminated water into drains, soil and surface water. Dispose of contaminated water and soil according to local regulations.
<b>UNUSUAL FIRE &amp; EXPLOSION HAZARDS:</b>	May ignite combustible materials and intensify rate of combustion.
<b>HAZARDOUS COMBUSTION PRODUCTS:</b>	Toxic or corrosive vapours may be released in fire situation.
<b>PROTECTIVE MEASURES IN FIRE:</b>	Fire fighters should wear self-contained breathing apparatus.

---

## 6. ACCIDENTAL RELEASE MEASURES:

---

<b>PERSONAL PRECAUTION IN SPILL:</b>	Avoid direct contact with skin, eyes and clothing. Wear appropriate protective clothing.
<b>PRECAUTIONS TO PROTECT ENVIRONMENT:</b>	Prevent material from entering drains or water courses. Advise the Environment Agency or relevant local authority if contamination of soil or water systems occurs.
<b>SPILL CLEANUP METHODS:</b>	Take-up spillage with absorbent, inert material and place in a suitable and closable labelled container for recovery or disposal. Wash the area clean with water and detergent, observing environmental requirements. Wash are clean with plenty of water, observing environmental requirements.

---

## 7. HANDLING AND STORAGE:

---

<b>USAGE PRECAUTIONS:</b>	<b>HANDLING</b> - Product should be used in accordance with good industrial principles for handling and storing of hazardous chemicals. Avoid contact with skin or eyes.
<b>STORAGE PRECAUTIONS:</b>	Store in a cool, dry, well ventilated place, in securely closed original container.

---

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:

---

<b>INGREDIENT NAME:</b>	<b>CAS No.:</b>	<b>STD</b>	<b>LT EXP 8 Hrs</b>	<b>ST EXP 15 Min</b>
SILVER NITRATE	7761-88-8	OES	0.01 mg/m3	

<b>INGREDIENT COMMENTS:</b>	Refer to the current edition of HSE Guidance Note EH 40/200* for occupational exposure limits; - exposure limit listed as silver compounds (as Ag)
<b>VENTILATION:</b>	Work in a fume cupboard or use local exhaust ventilation. Respiratory protection required in insufficiently ventilated working areas.
<b>PROTECTIVE GLOVES:</b>	Use impervious gloves made of butyl rubber or PVC.
<b>EYE PROTECTION:</b>	Approved chemical safety goggles or face protection.
<b>OTHER PROTECTION:</b>	Wear protective clothing and closed footwear. Wear suitable personal protective equipment appropriate to the task.
<b>HYGIENIC WORK PRACTICES:</b>	<b>SKIN PROTECTION</b> - apply barrier cream to hands and exposed skin. Promptly remove any clothing that becomes contaminated. Apply good personal hygiene principles, such as washing of hands, arms and face.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES:

---

<b>APPEARANCE:</b>	White crystals.		
<b>BOILING POINT (°C, interval):</b>	444 (decomposes)	<b>Pressure:</b>	
<b>MELT/FREEZ. POINT (°C, interval):</b>	mp. 212°C		
<b>DENSITY/SPECIFIC GRAVITY (g/ml):</b>	~ 4.33	<b>Temperature (°C):</b>	20
<b>SOLUBILITY DESCRIPTION:</b>	Very soluble in water.		

---

## 10. STABILITY AND REACTIVITY:

---

<b>STABILITY:</b>	Stable under normal conditions of use.
<b>CONDITIONS TO AVOID:</b>	Light sensitive material, darkens on exposure to light and in the presence of organic material.
<b>HAZARDOUS POLYMERIZATION:</b>	Can cause explosive polymerisation in contact with acrylonitrile.
<b>MATERIALS TO AVOID:</b>	Reacts with acetylene in the presence of ammonia to form silver acetylide which detonates when dry. Ammoniacal solutions can precipitate highly explosive silver nitride. Can form explosive products with ethanolic mixtures. Can ignite or pose explosion risk if mixed with organic materials (charcoal) or magnesium, phosphorus and sulphur .
<b>HAZARDOUS DECOMP. PRODUCTS:</b>	Oxygen.

---

## 11. TOXICOLOGICAL INFORMATION:

---

<b>TOXIC DOSE - LD 50:</b>	50 mg/kg (oral-mus)
<b>HEALTH HAZARDS, GENERAL:</b>	Corrosive to eyes, skin and mucous membranes.
<b>INGESTION:</b>	Harmful by ingestion. May cause burns to mucous membranes, throat and stomach.
<b>SKIN:</b>	Prolonged exposure may result in argyria, a bluish discolouration of skin. Incidental skin contact will cause blackening of skin.

---

## 12. ECOLOGICAL INFORMATION:

---

<b>ECOLOGICAL INFORMATION:</b>	Very toxic to aquatic organisms. Prevent contamination of soil, drains or surface water, use appropriate containment method to avoid environmental contamination.
--------------------------------	---

---

## 13. DISPOSAL CONSIDERATIONS:

---

<b>DISPOSAL METHODS:</b>	This material and/or its container must be disposed of as hazardous waste according to Special Waste Regulations 1996 or according to local regulations, in compliance with Duty of Care Regulations and Special Waste Regulations.
<b>WASTE CLASS:</b>	WASTE CODE: 0705** HAZARDOUS PROPERTY: H2, H8, H14

---

---

**14. TRANSPORT INFORMATION:**

---

UK ROAD PACK GR.:	II
ADR CLASS No.:	5.1
ADR CLASS:	Division 5.1: Oxidizing substances.
ADR ITEM No.:	22°(b)
HAZARD No. (ADR):	50 Oxidizing (fire-intensifying) substance.
ADR MARGINAL:	2501
HAZCHEM CODE:	2X
PROPER SHIPPING NAME I:	SILVER NITRATE
UN No. SEA:	UN 1493
IMDG CLASS:	5.1
IMDG PAGE No.:	5177
IMDG PACK GR.:	II
UN No., AIR:	UN-ID 1493
ICAO CLASS:	5.1
AIR PACK GR.:	II

---

**15. REGULATORY INFORMATION:**

---

**LABEL FOR SUPPLY:**

<b>RISK PHRASES:</b>	R-34 Causes burns. R-50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>SAFETY PHRASES:</b>	S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S-45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S-60 This material and its container must be disposed of as hazardous waste. S-61 Avoid release to the environment. Refer to special instructions/ Safety Data Sheets.
<b>UK REGULATORY REFERENCES:</b>	Chemicals (Hazard Information & Packaging) Regulations 1993. Classification, Packaging and Labelling Regulations 1984.

**16. OTHER INFORMATION:**

---

**INFORMATION SOURCES:** This product has been classified in accordance with CHIP3 regulations.

**REVISION COMMENTS:** Edition 01; Revised item(s):

**ISSUED BY:** MK

**SDS No.:** 420

**DATE:** 12/07/02

**DISCLAIMER:** The foregoing data has been compiled for safety information only and does not form part of any selling specification. Information contained in this Data Sheet is to the best of JMLs knowledge correct at the time of publication. Customers should always satisfy themselves, that the product which they have selected is entirely suitable for their purpose under their conditions of use and in compliance with current regulations. For any further information, please contact the supplier.