

Material Safety Data Sheet



Red Bird Service

205 Western Avenue P.O. Box 155 Osgood, IN 47037 USA

Phone: +1-812-689-4040

FAX: +1-812-689-4061

Health:	1 - Slight
Fire:	0 - Minimal
Reactivity:	0 - Minimal

Product: Silver Nitrate Solution

MSDS: 97080

Preparation Date: 5/20/99

Revision No: 6

Section 1 - Chemical Product and Company Identification

Product Chemical Name: A chemical mixture

Chemical Formula:

CAS No:

Manufacturer: Red Bird Services PO Box 155 205 Western Avenue Osgood IN 47037

For Emergency, call Chemtree 24 hours a day...800-424-9300

Catalog Number: SX-942, S-198, S-145, SX-976, S-153, S-173, S-172, S-200, SX-1235

Synonyms: None listed

Section 2 - Composition / Information on Ingredients

Ingredient	CAS Number	% wt or N
Silver Nitrate	7761-88-8	<5
Water	7732-18-5	balance

Material Safety Data Sheet

Product: Silver Nitrate Solution
Preparation Date: 5/20/99

MSDS: 97080
Revision No: 6

Section 2 - Composition / Information on Ingredients

OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH
TWA	STEL	TWA	STEL	TWA	STEL	IDLH
0.01mg/m3	0.01mg/m3	0.01mg/m3	Not listed	0.01mg/m3 as Ag	Not listed	10mg/m3 as Ag
not estab.	not estab.	not estab.	not estab.	not estab.	not estab.	not estab.

Section 3 - Hazard Information

*** EMERGENCY OVERVIEW - Potential Health Effects ***

Primary Entry Route: Eyes, nose, mouth, and skin .
Target Organs: Eyes, skin, respiratory system.
Acute Effects: Irritation of nose, eyes, skin, and mouth.

Inhalation: Irritant to dangerous

Eye: Irritant
Skin: Irritant

Ingestion: Irritant to toxic

Carcinogenicity: Not considered to be.

Medical Conditions: None listed

Chronic Effects: May cause liver or kidney damage

Material Safety Data Sheet

Product: Silver Nitrate Solution

MSDS: 97080

Preparation Date: 5/20/99

Revision No: 6

Section 4 - First Aid Measures

Inhalation: Move to fresh air, give oxygen if difficulty in breathing. Get medical attention.

Eye Contact: Flush with water for at least 15 minutes, including under eyelids. Get medical attention.

Skin Contact: Flush with water for 15 minutes. If irritation persists, get medical attention.

Ingestion: Give water to drink to dilute material. Induce vomiting. Never give anything by mouth to anyone who is unconscious or convulsing. Get medical attention.

Special Precautions: NA

Section 5 - Fire Fighting Measures

Flash Point: non flammable

Burning Rate: N/A

Auto Ignition Temperature: N/A

LEL: N/A

UEL: N/A

Flammability Classification: 0

Extinguishing Media: Use that of surrounding fire.

Unusual Fire/Explosion Hazards :
N/A

Hazardous Combustion Products:
May ignite combustibles

Instructions: Do not release runoff from fire control methods, to sewers, or waterways.

Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (scba) with a full facepiece operated with pressure demand or positive-pressure mode.

Material Safety Data Sheet

Product: Silver Nitrate Solution

MSDS: 97080

Preparation Date: 5/20/99

Revision No: 6

Section 6 - Accidental Release Measures

Spill/Leak Procedures: Neutralize with limestone, soda ash or sodium bicarbonate.

Small Spills: Absorb and collect for disposal as hazardous waste.

Large Spills: For containment; dike far ahead of the spill. Absorb and collect for disposal as hazardous waste. Do not release into sewer or waterways.

Regulatory Requirement: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Wear safety glasses, goggles, or face shield, safety gloves, personal protective clothing, or respirator or airlines as required in section 8 in this MSDS.

Storage Requirement: Store in closed container, cool, dry, in well-ventilated area, away from source of heat, and incompatible materials.

Regulatory Requirement: See section 15 of this MSDS.

Material Safety Data Sheet

Product: Silver Nitrate Solution

MSDS: 97080

Preparation Date: 5/20/99

Revision No: 6

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: N/A

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls: N/A

Respiratory Protection: Seek professional advise prior to respirator selection and use, Follow OSHA respirator regulations (29 CFR 1910.134) and if necessary, wear a MSHA/NIOSH approved respirator. Select respirator based on it's suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or nonroutine operations (cleaning spills, reactor vessels or storage tanks), wear an SCBA. Warning! Air purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing / Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety glasses. Per OSHA eye-and-face-ptotection regulations (29 CFR 1910.133).

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Contact lenses are not safety protection; soft lenses absorb and all lenses concentrate exposure. Practice good personal hygiene after use of this material especially before eating, drinking, smoking, using the toilet or applying cosmetics. Never eat, drink, or smoke in work areas.

Material Safety Data Sheet

Product: Silver Nitrate Solution

MSDS: 97080

Preparation Date: 5/20/99

Revision No: 6

Section 9 - Physical and Chemical Properties

Physical State:	liquid	pH:	N/A
Odor Threshold:	N/A	Boiling Point:	N/A
Vapor Press:	14	Freezing/ Melting Point:	N/A
Vapor Density	0.7	Viscosity:	N/A
Formula Wgt:	N/A	Refract Index:	N/A
Density:	N/A	Surface Tension:	N/A
Spec Gravity:	As water.	% Volatile:	> 1
Appearance Odor:	Clear, colorless liquid with no odor.		
Other Solubility:	N/A		
Evaporation Rate:	N/A		
Water Solubility:	Complete		

Section 10 - Stability and Reactivity

Stability:	Stable
Polymerization:	Cannot not occur
Chemical Incompatibilities:	Acetylene, ammonia, hydrogen peroxide, oxalic and tartaric acid
Conditions to Avoid:	Incompatibles
Hazardous Decomposition Products:	May decompose explosively

Material Safety Data Sheet

Product: Silver Nitrate Solution

MSDS: 97080

Preparation Date: 5/20/99

Revision No: 6

Section 11 - Toxicological Information

Eye Effect: Irritation

Skin Effect: Irritation

Acute Inhalation Effects: irritant to dangerous.

Acute Oral Effects: irritant to dangerous.

Chronic Effects: See section 3 in this MSDS.

Carcinogenicity: Not listed

Mutagenicity: Not listed

Teratogenicity: skn-mus TCLo: 15mg/kg/10 W-I

Section 12 - Ecological Information

Ecotoxicity: N/A

Environmental Fate: N/A

Environmental Transport: N/A

Environmental Degradation: N/A

Soil Absorption Mobility: N/A

Section 13 - Disposal Considerations

Disposal: See section 6 of this MSDS

Disposal Regulatory Requirements: See section 15 of this MSDS.

Container Cleaning and Disposal: N/A

Material Safety Data Sheet

Product: Silver Nitrate Solution

MSDS: 97080

Preparation Date: 5/20/99

Revision No: 6

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101)

Shipping Name: Not Regulated

Shipping Symbols: N/A

Hazard Class: N/A

ID No: N/A

Packing Group: N/A

Label: N/A

Special Provision: N/A

Packaging: N/A

Exceptions:

Non-Bulk Packaging: N/A

Bulk Packaging: N/A

Quantity Limitations:

Passenger, Air, or Rail: N/A

Cargo Aircraft Only: N/A

Vessel Stowage Requirements:

Vessel Stowage: N/A

Other: N/A

Section 15 - Regulatory Information

EPA Regulation:

RCRA hazardous waste number: Not listed (40 CFR 261.33)

RCRA hazardous Waste classification: (40 CFR 261.??): Not classified.

CERCLA hazardous Substance (40 CFR 302.4): not listed specific peer RCRA, Sec 3001; CWA, Sec 311 (b)(4); CWA, Sec 307(a),

CAA:

CERCLA Reportable Quality (RQ):

SARA 311/312 Codes:

SARA Toxic Chemical (40 CFR 372.65):

SARA EHS (Extremely hazardous substance)(40 CFR 355): Not listed, Threshold Planning Quality (TPQ) Not Listed

OSHA Regulations:

Air contaminant (29 CFR 1910.1000, Table Z-1-A):

OSHA Specifically Regulated Substance(29 CFR 1910.1000):

State Regulations: STCC Listed,

DOT(40 CFR 172.101 Append.):

ACGIH Threshold Limit Value:

MAK: not listed

TSCA: not listed

ANNEX I: not listed

Material Safety Data Sheet

Product: Silver Nitrate Solution

MSDS: 97080

Preparation Date: 5/20/99

Revision No: 6

Section 16 - Other Information

Prepared By: Barb Campbell

Approved By: _____



Disclaimer: Judgements as to suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of such information, Red bird service extends no warranties, suitability of such information for application to purchasers intended purposes or for the consequences of its use.