Material Safety Data Sheet

Silver Nitrate(Acidified) - 500 ml Btl (RXSOL-60-6108-500)

1. Product and Company Identifaction

Product Name	Silver Nitrate(Acidified) - 500 ml Btl
Part Number	RXSOL-60-6108-500

Company Details:

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

Branch : Kandla, Mumbai , Chennai, Vizag, Kolkata, UAE , OMAN , CANADA and KENYA

Phone	+91 22 20871200 - 1400
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Email	mail@rxmarine.com
Website	www.rxmarine.com/

2. Composition / informationon ingredients

Chemical Name	CAS	EC number	Weight	Molecular Formula
Silver Nitrate solution	7761-88-8	231-853-9	>= 10 % - 20 %	$C_{20}H_{13}N_2NaO_5S$
Proprietory	--	--	1 - 5%	

3. Hazards Identification

Signal Word	Danger
Hazard Statements	H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H410 Very toxic to aquatic life with long lasting effects.
P280 Wear protective gloves.P305 + P351 + P338	Wear eye protection/ face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Precautionary statements - response	P234 Keep only in original container. P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. P280 Wear protective gloves/protective clothing/eye protection/face protection. P284 Wear respiratory protection. P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P302 + P352 IF ON SKIN: Wash with plenty of water. P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308 + P313 IF exposed or concerned: Get medical advice/ attention.
Response	None
Disposal	NA
Prevention	NA
Supplemental Hazard Statements	None
Other hazards	The information required is contained in this Material Safety Data Sheet
Hazardous components which must be listed on the label	Silver nitrate

4. First Aid Measures

General advice	Take off all contaminated clothing immediately
If inhaled	Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.
Eye Contact	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice
Swallowed	After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.
Skin Contact	After contact with skin, wash immediately with plenty of water
Inhalation	Call a physician if irritation develops or persists.
Ingestion	When swallowed, allow water to be drunk. Do NOT induce vomiting. Call a physician immediately.
Notes to Physician	Treat symptomatically
If swallowed	After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.
Most important symptoms and effects, both acute and delaye	No data available
Indication of any immediate medical attention and special treatment needed	No data available

5. Fire-fighting Measures

Flammability	NA
Flash Point	CLOSED CUP: Higher than 93.3°C (200°F).
Unsuitable extinguishing media	NA
Special hazards arising from the substance or mixture	Carbon oxides Mixture with combustible ingredients. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapours possible in the event of fire.
Further information	Prevent fire extinguishing water from contaminating surface water or the ground water system.
Hazardous combustion products	Fire may cause the evolution of Sulphur oxides, nitrogen oxides.
Advice for firefighters	Wear self-contained breathing apparatus and protective suit. No unprotected exposed skin areas
Protective Equipment	Use personal protective equipment.
Specific Hazards Arising from the mical	Fire or intense heat may cause violent rupture of packages.
Extinguishing media	Suitable extinguishing media: Water spray FoamCarbon dioxide (CO2) Dry powder Dry sand Extinguishing media which shall not be used for safety reasons:High volume water jet

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Use personal protective equipment.
Spillage	Oxidizing material. Stop leak if without risk. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Prevent entry into sewers, basements or confined areas dike if needed. Eliminate all ignition sources. Call for assistance on disposal.
Personal Protection	Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders
Enviromental Precaution	Do not let product enter drains.
Methods and materials for containment and cleaning	Soak up with inert absorbent material. Pick for disposal in tightly closed containers Do not pick up with the help of saw-dust or other combustible substances.
Special hazards arising from the substance or mixture	Fire or intense heat may cause violent rupture of packages. Nitrous gases

7. Handling and Storage

Advice on safe handling	Exhaust ventilation at the object is necessary.Advice on protection against fire and explosion: Normal measures for preventive fire protection. Hygiene measures:Keep working clothes separately. Separate rooms are required for washing, showering and changing clothes.

Advice on protection against fire and explosion	Keep away from open flames, hot surfaces and sources of ignition.Take precautionary measures against static discharge
Hygiene measures	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions
Precautions for safe handling	Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.
Conditions for safe storage, including any incompatibilities	Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place
Storage conditions	Tightly closed. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons. Light sensitive. Moisture sensitive.
Storage conditions	Tightly closed. Dry
Storage class	Storage class (TRGS 510): 13: Non Combustible Solids
Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated
Handling	Keep away from heat. Keep away from sources of ignition. Keep away from combustible material.. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as reducing agents, combustible materials, organic materials, metals
Advice on general occupational hygiene	Advice on safe handling Observe label precautions. Change contaminated clothing. Wash hands after working with substance.

8. Exposure controls and personal protection

Components	Basis/Value type	Value / Form of exposure	Exceeding Factor	Remarks
Silver nitrate	EH40 WEL	as Ag	-	Listed
Silver nitrate	EH40 WEL TWA	0,01 mg/m3 as Ag	-	
Silver nitrate	EU ELV TWA	0,01 mg/m3 as Ag	-	Indicative

Occupational Exposure limit values	No data available
Biological limit values	No data available
Exposure controls	The Personal Protective Equipment must be in accordance with EN standards:respirator EN 136, 140, 149; safety glasses EN 166; protective suit: EN 340, 463, 468, 943-1, 943-2; gloves EN 374, 511; safety shoes EN-ISO 20345.Avoid contact with skin and eyes.Take off all contaminated clothing immediately.Wash hands before breaks and at the end of workday
Engineering Control	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Eye/face protection	Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US)
Body Protection	protective clothing
Skin protection	Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
Respiratory protection	If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.
Other Protection Measure	Handle in accordance with good industrial hygiene and safety practice.
Control of environmental exposure	Do not let product enter drains. Risk of explosion.
Thermal hazards	No data available
Engineering measures	Use with local exhaust ventilation.
Environmental exposure controls	Handle in accordance with local environmental regulations and good industrial practices.

9. Physical and chemical properties

Physical state	Liquid
Colour	Colourless
Odour	Odourless
Odor Threshold	Not Applicable
pH	Not Applicable
Melting Point	No data available
Boiling Point	> 100 °C
Flash Point	No data available
Evaporation Rate	Not Applicable
Flammability (solid, gas)	No data available
Explosive limits	No Data Available
Upper/lower flammability or explosive limits	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Vapour pressure	No Data Available
Density	1,140 g/cm3 at 20 °C
Vapour Density	Similar to water
Specific Gravity	No data available
Partition coefficient	No data available
Explosive properties	None
Solubility	DMSO (Slightly), Water (Slightly)
Ignition temperature	No information available.
Particle characteristics	No data available
Oxidizing properties	The substance or mixture is not classified as oxidizing.
Lower explosion limit	Not applicable

10. Stability and reactivity

Reactivity	No data available
Stability	No data available
Possibility of hazardous reactions	The product is oxidizing when dried.
Conditions to avoid	Protect from contamination. Protect from frost.
Incompatible materials	Strong reducing agents
Hazardous Polymerization	Toxic gases/vapours Toxic metal compounds

11. Toxicological information

Acute toxicity	NA
Skin corrosion/irritation	NA
Serious eye damage/eye irritation	NA
Respiratory or skin sensitization	NA
Serious eye damage/eye irritation	NA
Rout Of Entry	Inhalation. Ingestion.
Toxicity to Animal	NA
Toxic Effects on Human	NA
Germ cell mutagenicity	NA
Reproductive toxicity	NA

Specific target organ toxicity - single exposure	NA
Special Remarks on other Toxi Effects on Humans	NA
Additional Information	NA
Special Remarks on other Toxi Effects on Humans	NA
Assessment	NA
Endocrine disrupting properties	NA

12. Ecological information

Persistence and degradability	No data available
Toxicity	No data available
Bioaccumulative potential	No data available
Toxicity to fish	No data available
Toxicity to daphnia and other aquatic invertebrates	No data available
Toxicity to algae	No data available
Eco Toxicity	Not Available
COD and BOD 5	Not Available
Products Biodegradation:	No data available.
Mobility in soil	No Information available
Results of PBT and vPvB assessment	No data available
Endocrine disrupting properties	No data availabler
Assessment	No data available
Other adverse effects	The methods for determining biodegradability are not applicable to inorganic substances. We have no quantitative data concerning the ecological effects of this product

13. Disposal considerations

Disposal methods	Dispose according to legal requirements
Contaminated packaging	NA
Waste treatment Method	NA.

14. Transport information

UN number	ADR/RID: 3264
Description of the goods	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Class	8
Packaging group	III
Classification Code	C1
ADR/RID-Labels	8
Environmentallyhazardous	yes
IATA	UN Number:3264Description of the goods:Corrosive liquid, acidic, inorganic, n.o.s.(silver nitrate, Solution)Class:8 Packaging group:III
IMDG	UN Number:3264 Description of the goods: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.(SILVER NITRATE, SOLUTION) Class:8 Packaging group:III Hazard Labels :8 EmS Number: F-A, SB Marine pollutant : yes yes IMDG Code segregation group 1 – ACIDS,

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture	This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Safety, health and environmental regulations specific for the product in question	European Inventory of Existing Commercial Chemical Substances (EINECS) -Listed.EC Inventory Listed. United States Toxic Substances Control Act (TSCA) Inventory- Listed. China Catalog of Hazardous chemicals 2015 Not- Listed. New Zealand Inventory of Chemicals (NZIoC)Listed. PICCS - Listed. Vietnam National Chemical Inventory -Listed. IECSC Listed. Korea Existing Chemicals List (KECL) -Listed.
National legislation	Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. : ACUTE TOXIC : ENVIRONMENTAL HAZARDS
DSCL (EEC)	R8- Contact with combustible material may cause fire. R20/22- Harmful by inhalation and if swallowed. R36/37/38- Irritating to eyes, respiratory system and skin. R42/43- May cause sensitization by inhalation and skin contact. S22- Do not breathe dust. S24- Avoid contact with skin. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S37- Wear suitable gloves.
Other regulations	Take note of Dir 94/33/EC on the protection of young people at work
Chemical Safety Assessment	For this product a chemical safety assessment was not carried out

16. Other information

Other Information	The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and weassume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Rx Marine International has been advised of the possibility of such damages