

## 1. Product and Company Identification

www.rxmarine.com

Product Name **Silver Nitrate (Solid/Crystal) AR**

Product Type RXSOL-60-6142-100

### Company Details:

RX MARINE INTERNATIONAL

105, A wing , BSEL , TECH PARK.

VASHI ,NEW BOMBAY 400703 INDIA

Stock Point : Mumbai, Kolkata, Chennai, Gandhidham, Visakhapatnam, Fujairah, Muscat

Phone +91 22 27815541 / 42

Fax +91 22 2781 1318 ::AOH :0091 9821214367

Email [mail@rxmarine.com](mailto:mail@rxmarine.com)

## 2. Composition / Information on ingredients

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| Ingredient                    | CAS No    | Percent |
|-------------------------------|-----------|---------|
| <b>Silver Nitrate Crystal</b> | 7761-88-8 | 99.80 % |

## 3. Hazards Identification

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**Emergency Overview:** DANGER! STRONG OXIDIZER! CONTACT WITH COMBUSTIBLE MATERIAL MAY CAUSE FIRE. CORROSIVE. CAUSES BURNS TO ANY AREA OF CONTACT. HARMFUL OR MAY BE FATAL IF SWALLOWED OR INHALED. Safety Ratings: Health: 3, Severe Reactivity: 3, Severe Flammability: 0, None Contact: 3, Severe

OSHA Regulatory Status: This product is considered a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

|                   |                                                                                                               |
|-------------------|---------------------------------------------------------------------------------------------------------------|
| Appearance        | Powder / Crystal                                                                                              |
| Contact with eyes | Corrosive. Causes severe eye burns. May cause permanent eye damage.                                           |
| Contact with skin | Corrosive. Causes severe skin burns. May discolor skin.                                                       |
| Inhalation        | Corrosive. May cause damage to mucus membranes and respiratory tract.                                         |
| Ingestion         | Corrosive. Harmful if swallowed. May cause burns to the lips, oral cavity, esophagus, and/or digestive tract. |
| Target Organs     | Skin, eyes, respiratory tract, blood, liver, kidneys                                                          |

|                                   |                                                                                                                                                                |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chronic Health Effects            | Corrosive. Prolonged contact causes serious tissue damage. May cause liver and/or kidney damage. Risk of damage to blood system.                               |
| Aggravation of Medical Conditions | Persons with pre-existing skin disorders or eye problems, or impaired kidney or respiratory function may be more susceptible to the effects of this substance. |

#### 4. First Aid Measures

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|                     |                                                                                                                                                                                                                                                                                            |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inhalation:         | Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Get medical attention if symptoms occur.                                                                                                                                 |
| Ingestion:          | Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Never give anything by mouth to an unconscious person. GET MEDICAL ATTENTION OR CALL POISON CONTROL CENTER IMMEDIATELY.                                             |
| Skin Contact:       | In case of contact, wash skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if symptoms persist.                                                                                                 |
| Eye Contact:        | Check for and remove contact lenses. Immediately flush eyes with gentle large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention if symptoms persist.                                                                            |
| General Advice:     | In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Bring this safety data sheet to the doctor in attendance. |
| Notes to Physician: | Treat symptomatically.                                                                                                                                                                                                                                                                     |

#### 5. Fire-fighting Measures

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##### Extinguishing media

Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>).

Unsuitable extinguishing media : Do not use a heavy water stream. 5.2.

##### Special hazards arising from the substance or mixture

Fire hazard : May intensify fire; oxidiser.

Explosion hazard : Heating may cause a fire or explosion. 5.3.

##### Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

## 6. Accidental Release Measures

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|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal Precautions       | Ventilate area of leak or spill. Eliminate all sources of ignition. Isolate area and keep unnecessary and unprotected personnel away from the leak or spill. Keep upwind. Keep out of low areas. Wear appropriate personal protective equipment as specified in the Exposure Control Personal Protection Section 8. Avoid contact with eyes, skin, and clothing. Avoid inhalation of dusts. Wear a dust mask if dust is generated above exposure limits. |
| Methods for Containment:   | Stop leak if you can do so without risk. Keep combustibles (wood, paper, etc.) away from spilled material. If sweeping of a contaminated area is necessary, use a dust suppressant agent which does not react with the product. Prevent entry into waterways, sewer, basements or confined spaces. Dike the spilled material if necessary.                                                                                                               |
| Methods for Cleaning Up:   | Keep combustibles away from spilled material. Pick up and place in noncombustible container for reclamation or disposal, using a method that does not generate dust. Clean contaminated surface thoroughly. Never return spills in original containers for re-use. Clean up in accordance with applicable regulations.                                                                                                                                   |
| Environmental Precautions: | Prevent further leakage or spillage if safe to do so. Do not contaminate waterways, water courses or the ground. In case of spill, dike if needed.                                                                                                                                                                                                                                                                                                       |

## 7. Handling and Storage

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|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Handling | Wear personal protective equipment (see section 8). Use only in well-ventilated areas. Provide sufficient air exchange and/or exhaust in work rooms. Wear appropriate respiratory equipment in case of insufficient ventilation. Protect from direct sunlight. Avoid contact with skin, eyes and clothing. Do not breathe dust. Keep formation of airborne dusts to a minimum. Do not ingest. Do not eat, drink, or smoke while handling this product. Do not handle near an open flame, heat, or other sources of ignition. Keep away from incompatible materials such as combustibles, reducing agents, organic materials, metals, acids, moisture. Handle in accordance with good hygiene and safety practice. Wash thoroughly after handling. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquids). Observe all warnings and precautions listed on the product. |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Storage:** Store in a cool, dry, ventilated area away from flame, sources of ignition, and incompatible materials. Do not store near combustibles, organic materials, or other oxidizable materials. Keep containers tightly closed and upright. Protect from physical damage. Keep away from food, drink and animal feedingstuffs. Keep out of the reach of children.

## 8. Exposure controls and personal protection

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**Exposure Limits** ACGIH (TWA): 0.01 mg/m<sup>3</sup>  
OSHA (PEL): 0.01 mg/m<sup>3</sup>.

**Exposure controls** Ensure adequate ventilation. Ventilation rates should be maintained under all conditions. If applicable, use process enclosures, local exhaust ventilation, and other engineering controls to maintain airborne levels below recommended exposure limits or to acceptable levels.

**Eye Protection:** Wear safety glasses with side shields or goggles

**Skin Protection:** Wear appropriate chemical resistant clothing (with long sleeves) and appropriate chemical resistant gloves

**Respiratory Protection** A NIOSH- approved dust respirator may be necessary under certain circumstances where airborne concentrations are at unacceptable levels. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

**General Hygiene Considerations:** Avoid contact with skin, eyes, clothing, and combustible materials. Remove contaminated clothing and wash contaminated clothing promptly. Do not breathe dust. When working, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Provide eyewash station and safety shower.

## 9. Physical and chemical properties

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**Odour** Odorless

**Appearance** Crystalline powder

**pH** 6-7 (Aqueous solution)

**Boiling point** 440°C (824°F) (Decomposes)

**Freezing/Melting Point:** 212°C (414°F)

**Vapour density** 5.8 (Air=1)

**Specific Gravity:** 4.35

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|                   |                      |
|-------------------|----------------------|
| Evaporation Rate: | No information found |
| Percent Volatile: | No information found |

## 10. Stability and reactivity

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Stability: Stable under normal conditions.

Conditions to Avoid: Incompatibles, combustibles, heat, light.

Incompatible Materials: Combustible materials, reducing agents (oxidizable substances), organic materials, alkalis, sulfur. Hazardous Decomposition Nitrogen oxides. May decompose upon heating to produce corrosive and/or toxic fumes.

Products: Possibility of Hazardous May react violently with the incompatible materials listed above.

Reactions: Hazardous Polymerization: Will not occur

## 11. Toxicological information

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Toxicological Data: Oral Rat LD50: 1173 mg/kg

Acute Effects: Harmful if swallowed, inhaled, or absorbed through skin.

Local Effects: Causes burns to any area of contact. Sensitization: Not a skin sensitizer.

Chronic Effects: Corrosive. Prolonged contact causes serious tissue damage. May cause damage to the blood, lungs, liver and/or kidneys.

Carcinogenic Effects: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Skin Corrosion/Irritation: Corrosive to skin and eyes. Epidemiology: No epidemiological data is available for this product.

Mutagenicity: May affect genetic material.

Neurological Effects: No information found

Reproductive Effects: May cause adverse reproductive effects.

Teratogenic Effects: No information found

Target Organs and Symptoms: Skin, Eyes, Mucus Membranes, Blood, Lungs, Liver, Kidneys. Corrosive effects

## 12. Ecological information

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|                        |                                                            |
|------------------------|------------------------------------------------------------|
| Toxicity               | Ecology - water : Very toxic to aquatic life.              |
| Ecotoxicological Data: | EC50 Water flea (Daphnia magna): 0.0008 mg/L 48 H LC50     |
|                        | Fathead minnow (Pimephales promelas): 0 - 0.0072 mg/L 96 H |
| Ecotoxicity:           | Very toxic to aquatic life with long lasting effects       |
| Environmental Effects: | Toxic to the environment.                                  |
| Persistence and        | The product is not readily biodegradable.                  |
| Degradability:         |                                                            |
| Partition Coefficient  | No information found                                       |

## 13. Disposal considerations

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|                         |                                                                                                                                                                   |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Disposal Instructions:  | Dispose of this material and its container to hazardous or special collection point. All wastes must be handled in accordance with local and federal regulations. |
| Contaminated Packaging: | Since emptied containers retain product residue, follow label warnings after container is emptied. Offer rinsed packaging material to local facilities.           |
| Waste Codes:            | No information found                                                                                                                                              |

## 14. Transport information

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|                       |                             |                   |
|-----------------------|-----------------------------|-------------------|
| Proper Shipping Name: | Silver Nitrate              |                   |
| UN NO.                | UN1493                      |                   |
| Hazard Class          | 5.1                         | PackingGroup      |
| Proper Shipping Name  | Silver Nitrate              |                   |
| ADR UN No.            | 1493                        |                   |
| ADRHazardClass        | 5.1                         |                   |
| Proper Shipping Name  | POTASSIUM HYDROGEN SULPHATE |                   |
| IMDG UN No.           | 1493                        |                   |
| IMDG Hazard Class     | 5.1                         | IMDG PackGroup.:  |
| IMDG EmS              |                             | IMDG subrisk      |
| IMDG Labels           | 5.1                         | IMDG Flashpoint:  |
| ProperShippingName    | Silver Nitrate              |                   |
| ICAO UnNo             | 1493                        |                   |
| ICAO HazardClass.     | 5.1                         | ICAO PackingGroup |
| ICAO subrisk          | -                           | ICAO Labels       |

|                          |                |                       |
|--------------------------|----------------|-----------------------|
| ICAO Flashpoint          | N/A            |                       |
| DOT Proper Shipping Name | Silver Nitrate |                       |
| Hazardous Material       | Silver Nitrate |                       |
| Hazard Class             | 5.1            | Identification Number |
| Product RQ (lbs):        | N/E            | DOT subrisk           |
| DOT Labels               | 5.1            | DOT Flashpoint        |

## 15. Regulatory information

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|                |                                                                                                                                                                                                                                                                              |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Risk Phrases   | Causes burns                                                                                                                                                                                                                                                                 |
| Safety Phrases | In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, eye/face protection and gloves. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible.) |

Safety, health and environmental regulations/legislation specific for the substance or mixture  
Relevant provisions of the European Union (EU)

- Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC): Not listed.
- Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS): Not listed.

## 16. Other information

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The information provided about the product on this Safety Data Sheet has been compiled from knowledge of the individual constituents. The data given here is based on current knowledge and experience. This Safety Data Sheet describes the product in terms of safety requirements and does not signify any warranty with regard to the product's properties. The data given here only applies when product used for proper application(s). The product is not sold as suitable for other applications - usage in such may cause risks not mentioned in this sheet. Do not use for other.

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Silver Nitrate

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