

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: SILVER SOLUTION - B

Recommended Use of the Chemical Antimicrobial additive. and Restrictions on Use

Ixom Operations Pty Ltd (Bronson & Jacobs division) - incorporated in Australia Supplier:

ABN: 51 600 546 512 Street Address: 70 Marple Avenue Villawood NSW 2163

Australia

Telephone Number: +61 2 8717 2929 Facsimile: +61 2 9755 9611

Emergency Telephone: 1 800 033 111 (ALL HOURS)

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Based on available information, not classified as hazardous according to Safe Work Australia; NON-HAZARDOUS CHEMICAL.

Classification of the chemical:

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations: Eye damage/irritation - Category 2B

Poisons Schedule (SUSMP): None allocated.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Product Description: Aqueous dispersion of silver particles (0.1-1%).

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Product Name: SILVER SOLUTION - B Issued: 20/09/2019 Substance No: 000000025398



Skin Contact:

If skin or hair contact occurs, remove contaminated clothing and wash skin and hair with soap and water. If irritation occurs seek medical advice.

Eye Contact:

If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes.

Ingestion:

Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek medical advice.

Indication of immediate medical attention and special treatment needed:

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

Unsuitable Extinguishing Media:

Water jet.

Specific hazards arising from the chemical:

Not combustible, however following evaporation of the water component of the material, the residual material can burn if ignited. On burning will emit toxic fumes, including those of oxides of carbon.

Special protective equipment and precautions for fire-fighters:

Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition. Keep containers cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/Environmental precautions:

If contamination of sewers or waterways has occurred advise local emergency services.

Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:

Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling:

Avoid skin and eye contact and breathing in vapour, mists and aerosols. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities:

Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from sources of heat or ignition. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

Product Name: SILVER SOLUTION - B Issued: 20/09/2019 Substance No: 000000025398



8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters: No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):

Silver, soluble compounds (as Ag): 8hr TWA = 0.01 mg/m³

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Appropriate engineering controls:

Ensure ventilation is adequate to maintain air concentrations below Workplace Exposure Standards. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as Personal Protective Equipment (PPE):

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES.







Wear overalls, safety glasses and impervious gloves. If determined by a risk assessment an inhalation risk exists, wear an organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid Colourless

Product Name: SILVER SOLUTION - B

Substance No: 000000025398

Issued: 20/09/2019 Version: 3



Odour: Odourless **Odour Threshold:** Not available Solubility: Soluble in water. Specific Gravity: Not available Relative Vapour Density (air=1): Not available Vapour Pressure (20 °C): Not available Flash Point (°C): Not applicable Flammability Limits (%): Not applicable Not applicable **Autoignition Temperature (°C):** Melting Point/Range (°C): Not available **Boiling Point/Range (°C):** Not available **Decomposition Point (°C):** Not available

pH: 2 ± 1

Viscosity: Not available Partition Coefficient: Not available

10. STABILITY AND REACTIVITY

Reactivity: No information available.

Chemical stability: Stable under normal conditions of use.

Possibility of hazardous

reactions:

None known.

Conditions to avoid: Avoid exposure to heat. Avoid exposure to moisture.

Incompatible materials: None known.

Hazardous decomposition

Substance No: 000000025398

products:

Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion: No adverse effects expected, however, large amounts may cause nausea and

vomiting.

Eye contact: A moderate eye irritant.

Skin contact: Contact with skin may result in irritation.

Inhalation: Material may be irritant to the mucous membranes of the respiratory tract

(airways).

Acute toxicity: No LD50 data available for the product.

Skin corrosion/irritation: Non-irritant. (1)

Serious eye damage/irritation: Moderate irritant (rabbit). (1)

Product Name: SILVER SOLUTION - B Issued: 20/09/2019



Respiratory or skin No known effect. (1)

sensitisation:

Chronic effects: No information available for the product.

Mutagenicity: Non-mutagenic in AMES test. (1)

Carcinogenicity: No information available. Reproductive toxicity: No information available. **Specific Target Organ Toxicity** No information available.

(STOT) - single exposure:

Specific Target Organ Toxicity No information available.

(STOT) - repeated exposure:

No information available. Aspiration hazard:

Long term absorption (5-10 years) of silver or its compounds by inhalation or ingestion may produce generalised 'Argyria' - a permanent blue/grey discolouration of the skin. (1)

12. ECOLOGICAL INFORMATION

Ecotoxicity Avoid contaminating waterways.

Persistence/degradability: No information available.

No information available. Bioaccumulative potential:

Mobility in soil: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Refer to Waste Management Authority. Dispose of contents and container in accordance with local, regional, national, international regulations.

14. TRANSPORT INFORMATION

Road and Rail Transport

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Marine Transport

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

Air Transport

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

15. REGULATORY INFORMATION

Product Name: SILVER SOLUTION - B Issued: 20/09/2019 Substance No: 000000025398



Classification:

Based on available information, not classified as hazardous according to Safe Work Australia; NON-HAZARDOUS CHEMICAL.

Classification of the chemical:

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:

Eye damage/irritation - Category 2B

Poisons Schedule (SUSMP): None allocated.

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

(1) Supplier Safety Data Sheet; 01/2019.

This safety data sheet has been prepared by Ixom Operations Pty Ltd (Toxicology & SDS Services).

Reason(s) for Issue:

Revised Primary SDS Change in Hazardous Chemical Classification Change in First Aid Measures Change in Personal Protection Requirements Update in Toxicological Information Change to Transport Information

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Bronson & Jacobs representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

Bronson and Jacobs incorporating the businesses of Woods and Woods and Keith Harris.

Product Name: SILVER SOLUTION - B Issued: 20/09/2019 Substance No: 000000025398