

# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### 1.1 Product identifier

**Product name** SILVER DORE  
**Synonyms** NYRSTAR SILVER DORE

### 1.2 Uses and uses advised against

**Uses** DECORATIVE COATING • DENTAL ALLOY • ELECTRONICS • INDUSTRIAL APPLICATIONS • JEWELLERY

### 1.3 Details of the supplier of the product

**Supplier name** NYRSTAR PORT PIRIE  
**Address** PO Box 219, Port Pirie, SA, 5540, AUSTRALIA  
**Telephone** (08) 8638 1500  
**Fax** (08) 8638 1583  
**Email** [info@nyrstar.com](mailto:info@nyrstar.com)  
**Website** <http://www.nyrstar.com>

### 1.4 Emergency telephone numbers

**Emergency** (08) 8638 1500

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

### 2.2 GHS Label elements

No signal word, pictograms, hazard or precautionary statements have been allocated.

### 2.3 Other hazards

No information provided.

## 3. COMPOSITION/ INFORMATION ON INGREDIENTS

### 3.1 Substances / Mixtures

| Ingredient | CAS Number | EC Number | Content |
|------------|------------|-----------|---------|
| SILVER     | 7440-22-4  | 231-131-3 | >98%    |
| GOLD       | 7440-57-5  | 231-165-9 | <1%     |

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**Eye** Exposure is considered unlikely.  
**Inhalation** Due to product form / nature of use, an inhalation hazard is not anticipated.  
**Skin** Exposure is considered unlikely. Skin irritation is not anticipated.  
**Ingestion** For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). Due to product form and application, ingestion is considered unlikely.  
**First aid facilities** Normal washroom facilities should be available.

#### **4.2 Most important symptoms and effects, both acute and delayed**

This product may discolour the skin.

#### **4.3 Immediate medical attention and special treatment needed**

Treat symptomatically.

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## **5. FIRE FIGHTING MEASURES**

### **5.1 Extinguishing media**

Use an extinguishing agent suitable for the surrounding fire.

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

Non flammable. May evolve toxic gases (silver oxides) when heated to decomposition.

### **5.3 Advice for firefighters**

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire.

### **5.4 Hazchem code**

None allocated.

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## **6. ACCIDENTAL RELEASE MEASURES**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS.

### **6.2 Environmental precautions**

Prevent product from entering drains and waterways.

### **6.3 Methods of cleaning up**

If spilt, collect and reuse where possible.

### **6.4 Reference to other sections**

See Sections 8 and 13 for exposure controls and disposal.

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## **7. HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

### **7.2 Conditions for safe storage, including any incompatibilities**

Store in a cool, dry, well ventilated area, removed from incompatible substances and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use.

### **7.3 Specific end uses**

No information provided.

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## **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

### **8.1 Control parameters**

#### **Exposure standards**

| Ingredient    | Reference | TWA |                   | STEL |                   |
|---------------|-----------|-----|-------------------|------|-------------------|
|               |           | ppm | mg/m <sup>3</sup> | ppm  | mg/m <sup>3</sup> |
| Silver, metal | SWA [AUS] | --  | 0.1               | --   | --                |

#### **Biological limits**

No biological limit values have been entered for this product.

**8.2 Exposure controls**

**Engineering controls** Avoid inhalation. Use in well ventilated areas. Maintain dust levels below the recommended exposure standard.

**PPE**

|                    |  |
|--------------------|--|
| <b>Eye / Face</b>  | Not required under normal conditions of use.   |
| <b>Hands</b>       | Wear PVC or rubber gloves.   |
| <b>Body</b>        | When using large quantities or where heavy contamination is likely, wear coveralls. In a laboratory situation, wear a laboratory coat. |
| <b>Respiratory</b> | Not required under normal conditions of use.   |



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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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**9.1 Information on basic physical and chemical properties**

|                                  |                       |
|----------------------------------|-----------------------|
| <b>Appearance</b>                | SILVER COLOURED SOLID |
| <b>Odour</b>                     | ODOURLESS             |
| <b>Flammability</b>              | NON FLAMMABLE         |
| <b>Flash point</b>               | NOT RELEVANT          |
| <b>Boiling point</b>             | NOT AVAILABLE         |
| <b>Melting point</b>             | NOT AVAILABLE         |
| <b>Evaporation rate</b>          | NOT AVAILABLE         |
| <b>pH</b>                        | NOT AVAILABLE         |
| <b>Vapour density</b>            | NOT AVAILABLE         |
| <b>Solubility (water)</b>        | INSOLUBLE             |
| <b>Vapour pressure</b>           | NOT AVAILABLE         |
| <b>Upper explosion limit</b>     | NOT RELEVANT          |
| <b>Lower explosion limit</b>     | NOT RELEVANT          |
| <b>Partition coefficient</b>     | NOT AVAILABLE         |
| <b>Autoignition temperature</b>  | NOT AVAILABLE         |
| <b>Decomposition temperature</b> | NOT AVAILABLE         |
| <b>Viscosity</b>                 | NOT AVAILABLE         |
| <b>Explosive properties</b>      | NOT AVAILABLE         |
| <b>Oxidising properties</b>      | NOT AVAILABLE         |

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**10. STABILITY AND REACTIVITY**

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**10.1 Reactivity**

The product is non-reactive under normal conditions of use, storage and transport.

**10.2 Chemical stability**

Stable under recommended conditions of storage.

**10.3 Possibility of hazardous reactions**

Polymerization is not expected to occur.

**10.4 Conditions to avoid**

Avoid heat, sparks, open flames and other ignition sources.

**10.5 Incompatible materials**

Incompatible with ammonia, oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid), carboxylic acid, zinc electrolytes, iodoform and acetylene (forming shock sensitive silver acetylide). Silver tarnishes when exposed to ozone, hydrogen sulphide, or sulphurous air.

**10.6 Hazardous decomposition products**

May evolve silver oxides when heated to decomposition.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

|                                 |  |
|---------------------------------|--|
| <b>Acute toxicity</b>           | Human evidence indicates that the product has very low acute oral, dermal or inhalation toxicity.  |
| <b>Skin</b>                     | Not classified as a skin irritant.   |
| <b>Eye</b>                      | Not classified as an eye irritant. Contact may result in mechanical irritation.  |
| <b>Sensitisation</b>            | Not classified as causing skin or respiratory sensitisation.   |
| <b>Mutagenicity</b>             | No evidence of mutagenic effects.  |
| <b>Carcinogenicity</b>          | No evidence of carcinogenic effects.   |
| <b>Reproductive</b>             | No relevant or reliable studies were identified.   |
| <b>STOT - single exposure</b>   | No known effects from this product.  |
| <b>STOT - repeated exposure</b> | Not classified as causing organ damage from repeated exposure. However, overexposure to silver may lead to a grey-blue discoloration of the skin, eyes, nose and throat (Argyria). |
| <b>Aspiration</b>               | Not applicable for solids.   |

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Not expected to be harmful to aquatic life. Silver in massive form presents a limited hazard for the environment. However in case of accidental release of large amounts a hazardous effect cannot be excluded.

### 12.2 Persistence and degradability

No data available.

### 12.3 Bioaccumulative potential

No data available.

### 12.4 Mobility in soil

Metals in massive form are not mobile in the environment.

### 12.5 Other adverse effects

No information provided.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

|                       |  |
|-----------------------|--|
| <b>Waste disposal</b> | Reuse where possible or return to manufacturer/supplier. May be recycled. Do not release to drains or waterways. Contact the manufacturer/supplier for additional information (if required). |
| <b>Legislation</b>    | Dispose of in accordance with relevant local legislation.  |

## 14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

|                                    | LAND TRANSPORT (ADG) | SEA TRANSPORT (IMDG / IMO) | AIR TRANSPORT (IATA / ICAO) |
|------------------------------------|----------------------|----------------------------|-----------------------------|
| <b>14.1 UN Number</b>              | None allocated.      | None allocated.            | None allocated.             |
| <b>14.2 Proper Shipping Name</b>   | None allocated.      | None allocated.            | None allocated.             |
| <b>14.3 Transport hazard class</b> | None allocated.      | None allocated.            | None allocated.             |
| <b>14.4 Packing Group</b>          | None allocated.      | None allocated.            | None allocated.             |

### 14.5 Environmental hazards

No information provided.

### 14.6 Special precautions for user

|                     |                 |
|---------------------|-----------------|
| <b>Hazchem code</b> | None allocated. |
|---------------------|-----------------|

## 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

|                           |   |
|---------------------------|---|
| <b>Poison schedule</b>    | A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP). |
| <b>Classifications</b>    | Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).                    |
| <b>Inventory listings</b> | <b>AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals)</b><br>All components are listed on AIIC, or are exempt.                                      |

## 16. OTHER INFORMATION

|                               |   |
|-------------------------------|---|
| <b>Additional information</b> | <p><b>PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:</b></p> <p>The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.</p> |
|-------------------------------|---|

### HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

|                      |  |
|----------------------|--|
| <b>Abbreviations</b> | <p>ACGIH American Conference of Governmental Industrial Hygienists</p> <p>CAS # Chemical Abstract Service number - used to uniquely identify chemical compounds</p> <p>CNS Central Nervous System</p> <p>EC No. EC No - European Community Number</p> <p>EMS Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)</p> <p>GHS Globally Harmonized System</p> <p>GTEPG Group Text Emergency Procedure Guide</p> <p>IARC International Agency for Research on Cancer</p> <p>LC50 Lethal Concentration, 50% / Median Lethal Concentration</p> <p>LD50 Lethal Dose, 50% / Median Lethal Dose</p> <p>mg/m<sup>3</sup> Milligrams per Cubic Metre</p> <p>OEL Occupational Exposure Limit</p> <p>pH relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).</p> <p>ppm Parts Per Million</p> <p>STEL Short-Term Exposure Limit</p> <p>STOT-RE Specific target organ toxicity (repeated exposure)</p> <p>STOT-SE Specific target organ toxicity (single exposure)</p> <p>SUSMP Standard for the Uniform Scheduling of Medicines and Poisons</p> <p>SWA Safe Work Australia</p> <p>TLV Threshold Limit Value</p> <p>TWA Time Weighted Average</p> |
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| <b>Report status</b> | This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS'). |
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It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

**PRODUCT NAME    SILVER DORE**

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