

# MATERIAL SAFETY DATA SHEET

## SECTION 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Material Name:** Sodium citrate.  
**Catalogue Number:** C077.  
**Other Names:** Sodium citrate dihydrate; Citric acid trisodium salt dihydrate; Sodium citrate tribasic dihydrate; Trisodium citrate dihydrate.  
**Recommended Use:** Stain for electron microscopy.

**Supplier Name:** ProSciTech  
**Street Address:** 1/11 Carlton Street, Kirwan, Qld. 4817 Australia  
**Telephone Number:** (07) 4773 9444 - 8:30am – 5:00pm, Monday to Friday (excluding Public Holidays)  
**Emergency Contact:** (07) 4773 9444 - 8:30am – 5:00pm, Monday to Friday (excluding Public Holidays)

## SECTION 2 - HAZARDS IDENTIFICATION

**Hazard Classification:**  
Not classified as hazardous according to criteria for Classifying Hazardous Substances [NOHSC:1008].  
**Hazardous and/or Dangerous Nature:**  
NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.  
**Risk Phrases:**  
Not available.  
**Safety Phrases:**  
Not available.

*Refer to Section 15 for Poisons Schedule.*

## SECTION 3 - COMPOSITION /INFORMATION ON INGREDIENTS

**Pure Substance (Proportion 100%):**  
**Chemical Identity:** Sodium citrate.  
**Common Name(s):** Sodium citrate dihydrate; Citric acid trisodium salt dihydrate; Sodium citrate tribasic dihydrate; Trisodium citrate dihydrate.  
**CAS Number:** 6132-04-3

## SECTION 4 - FIRST AID MEASURES

**Ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth with water.  
**Inhalation:** If breathed in, move person into fresh air. If not breathing give artificial respiration.  
**Eye Contact:** Flush eyes with water as a precaution.  
**Skin Contact:** Wash off with soap and plenty of water.  
**First Aid Facilities:** Eyebath/eyewash, Safety shower & general washroom facilities.  
**Medical Attention & Special Treatment:**  
Not available.  
**Additional Information:**  
Not available.

## SECTION 5 - FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:**  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.  
**Hazards from Combustion Products:**  
Hazardous decomposition products formed under fire conditions. - Carbon oxides  
**Precautions for Fire Fighters:**  
Wear self contained breathing apparatus for fire fighting if necessary.  
**Hazchem Code:** Not available.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Emergency Procedures:**  
Wear protective equipment– refer to Section 8. Avoid dust formation. Do not let product enter drains.  
**Containment & Clean up:**  
Sweep up and shovel. Keep in suitable, closed containers for disposal.

## SECTION 7 - HANDLING & STORAGE

### Precautions for Safe Handling:

Provide appropriate exhaust ventilation at places where dust is formed.

### Precautions for Safe Storage:

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

## SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

**National Exposure Standards:** No exposure standard allocated.

**Biological Limit Values:** No biological limit allocated.

### Engineering Controls:

Use in a well ventilated area.

### Personal Protective Equipment:

Respiratory protection: Respiratory protection is not required. For nuisance levels of dusts, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators approved by government standards e.g. NIOSH (US) /CEN (EU).

Hand protection: For prolonged or repeated contact use protective gloves.

Eye protection: Safety glasses.

Hygiene measures: General industrial hygiene practice.

## SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES

<b>Appearance:</b>	White powder.
<b>Odour:</b>	Not available.
<b>pH:</b>	7.5-9 at 26.4 g/l at 25°C.
<b>Vapour pressure (mm of Hg at °C):</b>	Not available.
<b>Vapour density:</b>	Not available.
<b>Boiling point/range (°C):</b>	Melting point: >300°C.
<b>Freezing/melting point (°C):</b>	Not available.
<b>Solubility:</b>	29.4 g/l at 20 °C - completely soluble
<b>Specific gravity or density:</b>	Not available.
<b>Flash Point:</b>	Not available.
<b>Flammable (explosive) limits:</b>	Not available.
<b>Ignition temperature:</b>	Not available.
<b>Formula :</b>	Na <sub>3</sub> C <sub>6</sub> H <sub>5</sub> O <sub>7</sub> · 2H <sub>2</sub> O
<b>Molecular Weight :</b>	294.1 g/mol

## SECTION 10 - STABILITY AND REACTIVITY

**Chemical stability:** Stable under normal conditions of use.

**Conditions to avoid:** Heat and incompatible materials.

**Incompatible Materials:** Strong oxidizing agents.

### Hazardous Decomposition Products:

Hazardous decomposition products formed under fire conditions. - Carbon oxides

**Hazardous Reactions:** Will not occur.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### Exposure and Health Effects:

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### Ingestion:

May be harmful if swallowed.

### Inhalation:

May be harmful if inhaled. May cause respiratory tract irritation.

### Eye Contact:

May cause eye irritation.

### Skin Contact:

May be harmful if absorbed through skin. May cause skin irritation.

**Human/Animal data:** Not available.

**Carcinogenic Category:** Not classified as a Carcinogen by the IARC.

**Other Carcinogenic Information:** Not available.

**SECTION 12 – ECOLOGICAL INFORMATION**

**Ecotoxicity:** Not available.  
**Persistence and degradability:** Not available.  
**Mobility:** Not available.  
**Additional Information:** Not available.

**SECTION 13 - DISPOSAL CONSIDERATIONS****Disposal Methods:**

Observe all federal, state, and local environmental regulations when disposing.

**Special Precautions/Additional Informational:**

Dispose of contaminated packaging as an unused product.

**SECTION 14 - TRANSPORT INFORMATION**

**UN Number:** Not regulated.  
**UN Proper Shipping Name:** Not regulated.  
**Class and Subsidiary risk:** Not regulated.  
**Packing Group:** Not regulated.  
**Special Precautions for User:** Not available.  
**Hazchem Code:** Not available.

**SECTION 15 - REGULATORY INFORMATION**

**Poison Schedule Number:** None Allocated.

**SECTION 16 - OTHER INFORMATION**

**Date of preparation of MSDS:** April 11

**Comments:****List of Publications referenced when creating this MSDS;**

- Hazardous Substances Information System Consolidated Lists: Safe Work Australia.
- APPROVED CRITERIA FOR CLASSIFYING HAZARDOUS SUBSTANCES [NOHSC:1008(2004)] 3rd Edition: National Occupational Health and Safety Commission.
- Dangerous Goods - Initial Emergency Response Guide (SAA/SNZ HB76:1997).
- IATA Dangerous Goods Regulations.
- Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)].
- Australia Standard for the Uniform Scheduling of Drugs and Poisons [SUSPD] (Australian Government Department of Health and Ageing).

*This Material Safety Data Sheet (MSDS) has been prepared in compliance with the National code of Practice for the Preparation of Material Safety Data Sheets 2<sup>nd</sup> Edition [NOHSC:2011(2003)]. It is the user's responsibility to determine the suitability of this information for adoption of necessary safety precautions. The information published in this MSDS has been compiled from the publications listed in Section 16: to the best of our ability and knowledge these publications are considered accurate. We reserve the right to revise Material Safety Data Sheets as new information becomes available. Copies may be made for non-profit use.*

**... End of MSDS ...**