

SAFETY DATA SHEET

1. IDENTIFICATION AND SUPPLIER

Product Name: ClO2 Neutraliser
Other Name: Sodium Thiosulphate, Sodium Hyposulphite, Antichlor, Hypo
Proper Shipping Name: Sodium Thiosulphate Pentahydrate
Use: As a neutralising compound for split or broken JayFresh sachets.
Supplier: Jaymak Australia
Address: 242 Grenfell Street, Adelaide SA 5000 P: 1300 529 625
Emergency Number: Poisons Information Centre: Australia 131 126, New Zealand 0800 764 766
Emergency Services 000

2. HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION: 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; NON-HAZARDOUS SUBSTANCE.

SUSMP SCHEDULE: Not Scheduled

HAZARD CATEGORY: NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

PICTOGRAMS NONE

SIGNAL WORD NONE

HAZARD STATEMENTS NONE

PRECAUTIONARY STATEMENTS

GENERAL P101 If medical advice is needed, have product container or label at hand
P102 Keep out of reach of children P103 Read label before use

PREVENTION P232 Protect from moisture

P262 Do not get in eyes, on skin, or on clothing

P281 Use personal protective equipment as required

RESPONSE P301+ P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P363 Wash contaminated clothing before re-use.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do so. Continue rinsing
P335 Brush off loose particles from skin
P337 + P313 If eye irritation persists: Get medical advice
P391 Collect spillage

STORAGE P370 + P378 In case of fire, use carbon dioxide, dry chemical, foam, water fog
P402 + P404 Store in a dry place. Store in a closed container.

DISPOSAL

P501 If they cannot be recycled, dispose of contents to an approved waste disposal plant and containers to landfill (see Section 13 of this SDS)

3. COMPOSITION/INFORMATION OF INGREDIENTS

MIXTURE:

| Chemical identity of ingredients | Proportion of ingredients | CAS Number(s) for ingredients | GHS Hazard Phrases |
|----------------------------------|---------------------------|-------------------------------|--------------------|
| Sodium Thiosulphate | >99% | [10102-17-7] | |

If the sum of ingredients is less than 100%, the material consists of further ingredients determined not to be hazardous or below their cut-off limits as listed in HCIS

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (Phone Australia 131126; New Zealand 03 4747000 or a doctor.

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| Inhalation: | Remove victim from area of exposure to fresh air. Apply artificial respiration if patient is not breathing. If breathing is difficult, give oxygen. Seek medical advice if discomfort persists. |
| Skin Contact: | Remove contaminated clothing. Flush affected area with plenty of water (and soap if available). Seek medical attention in the event of irritation. |
| Eye Contact: | Immediately flush eyes with water for at least 15 minutes while holding eyelids open. If pain persists or recurs seek medical attention. |
| Ingestion: | Rinse mouth with water. Give water to drink, provided victim is conscious. Do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position if possible) to maintain open airway and prevent aspiration. Seek medical attention. |
| Indication of immediate medical attention and special treatment needed: | Treat symptomatically based on individual reactions of patient and judgement of doctor. |

5. FIRE FIGHTING MEASURES

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| SUITABLE EXTINGUISHING MEDIA | In case of fire, appropriate extinguishing media include water mist, sand, carbon dioxide, foam or dry chemical. Use water spray to cool nearby containers exposed to fire. |
| SPECIFIC HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE | Non-combustible solid. Negligible explosion hazard in dust form when exposed to heat or flame. Hazardous decomposition products include toxic oxides of sulphur. |
| SPECIAL PROTECTIVE PRECAUTIONS AND EQUIPMENT FOR FIRE FIGHTERS | Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire-fighting helmet, coat, trousers, boots and gloves). Clear fire area of all non-emergency. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire-fighting water for treatment. |

6. ACCIDENTAL RELEASE MEASURES

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| EMERGENCY PROCEDURES | If contamination of sewers or waterways has occurred advise local emergency services |
| /ENVIRONMENTAL PRECAUTIONS: | |
| PERSONAL PRECAUTIONS | Slippery when spilt. Avoid accidents, clean up immediately. |
| /PROTECTIVE EQUIPMENT | Wear protective equipment to prevent skin and eye contact and breathing in dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. |
| /METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: | |

7. HANDLING AND STORAGE

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| PRECAUTIONS FOR SAFE HANDLING | Avoid skin and eye contact and breathing in dust. Avoid handling which leads to dust formation. |
| CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES | Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from incompatible materials described in Section 10 |
| CONTAINER | Keep containers closed when not in use – check regularly for spills. |

8. EXPOSURE CONTROL/PERSONAL PROTECTION

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| NATIONAL EXPOSURE STANDARDS: | No exposure standard has been established for this product by the Australian Safety and Compensation Council (ASCC). However, the exposure standard for dust not otherwise specified is 10mg/m ³ (for inspirable dust) and 3mg/m ³ (for respirable) |
| BIOLOGICAL LIMIT VALUES | No information available on biological limits for this product |
| APPROPRIATE ENGINEERING CONTROLS: | Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. Avoid generating and breathing in dusts. 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, DUST MASK

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

9. PHYSICAL AND CHEMICAL PROPERTIES

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| APPEARANCE & COLOUR: | Clear to White Divided Solid crystals or granules |
| ODOUR | Odourless |
| FLAMMABILITY: | Not flammable, refer decomposition products |
| MELTING POINT: | 43-48°C |
| BOILING POINT: | >100°C |
| FLASH POINT: | Not applicable |
| DECOMPOSITION TEMP | >100°C |
| VAPOUR PRESSURE @ 21°C: | Negligible mm Hg (1 atmosphere) |
| VOLATILES: | Nil |
| VAPOUR DENSITY: | Not applicable |
| FLAMMABILITY LIMITS: | Not applicable |
| pH 5% aqueous solution: | 6.5-8.0 |
| SPECIFIC GRAVITY: | 1.7 |
| SOLUBILITY IN WATER: | Soluble (79g/100mL @ 4°C) Slowly decomposes in aqueous solution |

Release of invisible flammable vapours: Decomposition may produce fumes of flammable hydrogen sulphide

10. STABILITY AND REACTIVITY

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| Chemical Reactivity | Product is deliquescent (tending to absorb atmospheric water vapour and becomes a liquid). Hazardous polymerization will not occur. |
| Chemical Stability | Stable under ordinary conditions of use and storage. Stability limited in solution. Product is stable under normal conditions of use, storage and temperature. |
| Conditions to avoid | Avoid excessive heat, generating dust, direct sunlight, moisture and high temperatures. |
| Incompatible materials | Incompatible with sodium nitrite, potassium nitrite, sodium nitrate, halogens, acids, lead, silver salts, mercury and sources of ignition. Reacts with acids to release sulphur dioxide. |
| Hazardous decomposition products | Hazardous decomposition products include oxides of sulphur and hydrogen sulphide |

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:

SYMPTOMS OF EXPOSURE

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| Ingestion: | The material is moderately discomforting to the gastro-intestinal tract and may be harmful if swallowed in large quantity. |
| Eye Contact: | The material is moderately discomforting to the eyes and is capable of causing mild, temporary redness of the conjunctiva (similar to windburn), temporary impairment of vision and/or other transient eye damage/ulceration. |
| Skin Contact: | The material is moderately discomforting to the skin. Solution of material in moisture on the skin, or perspiration, may increase irritant effects. Open cuts, abraded or irritated skin should not be exposed to this material. |
| Inhalation: | The dust may be discomforting to the upper respiratory tract. Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled. |

ACUTE TOXICITY

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| Acute toxicity: | Not expected to be toxic |
| Skin corrosion/irritation: | Expected to be a mild irritant |

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| Serious eye damage/irritation | Expected to be a mild irritant |
| Respiratory or skin irritation/sensitization: | No data available |
| Germ cell mutagenicity: | Not expected to be mutagenic |
| Carcinogenicity: | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| Reproductive toxicity: | Not expected to impair fertility |
| Specific Target Organ Toxicity (STOT) – single exposure: | No data |
| Specific Target Organ Toxicity (STOT) – Repeated exposure | No data |
| Aspiration hazard: | Not expected to be a hazard |

12. ECOLOGICAL INFORMATION

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| ECOTOXICITY | No ecological information available for this product |
| PERSISTENCE AND DEGRADABILITY | No information available on persistence/degradability for this product |
| MOBILITY | No information available on mobility for this product |
| ADDITIONAL INFORMATION | |
| ENVIRONMENTAL FATE (EXPOSURE) | Avoid contaminating waterways, drains and sewers |
| BIOACCUMULATIVE POTENTIAL | No information available on bioaccumulation for this product |

13. DISPOSAL CONSIDERATIONS

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| DISPOSAL METHODS AND CONTAINERS | Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State and Federal Regulations or recycled/reconditioned at an approved facility. |
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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.

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|-------------------------------------|----------------------------------|
| UN NUMBER: | Not applicable |
| UN PROPER SHIPPING NAME: | SODIUM THIOSULPHATE PENTAHYDRATE |
| CLASS & SUBSIDIARY RISK: | Not applicable |
| PACKING GROUP: | Not applicable |
| SPECIAL PRECAUTIONS FOR USER | Not applicable |
| IERG | Not applicable |
| HAZCHEM CODE | Not applicable |

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

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| CLASSIFICATION: | Based on available information, not classified as hazardous according to Safe Work Australia NON-HAZARDOUS SUBSTANCE |
| CLASSIFICATION OF THE SUBSTANCE OR MIXTURE: | NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) |
| HAZARD STATEMENT(S): | NONE. |
| POISONS SCHEDULE (SUSMP): | Not scheduled |
| AICS | All ingredients are on the Australian Inventory of Chemical Substances |

16. OTHER INFORMATION

Preparation Date: 21 December 2016 valid for 5 years from this date
 Prepared by: SDS Manager

Contact Point:

JAYMAK AUSTRALIA PTY. LTD.
 242 Grenfell Street, Adelaide SA 5000
 Phone: 1300 529 625

Additional information

Key/legend to abbreviations and acronyms used in the SDS

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| ADG: | Australian Code for the Transport of Dangerous Goods by Road and rail. |
| ACGIH: | American Conference of Governmental Industrial Hygienists |
| ASCC: | Australian Safety and Compensation Council |
| Code AICS: | Australian Inventory of Chemical Substances |
| CAS Number: | Chemical Abstracts Service Registry Number |
| EPG: | Emergency Procedure Guide (superseded by IERG) |

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| Hazchem Code: | Emergency action code of numbers and letters that provide information to emergency services especially firefighters |
| IARC: | International Agency for research on Cancer |
| IATA: | International Air Transport Association |
| IERG: | HB 76-2004 Dangerous goods – Initial Emergency Response Guide |
| LEL: | Lower flammable (explosive) limits in air |
| LD ₅₀ : | Lethal Dose sufficient to kill 50% of test population |
| NIOSH: | National Institute for Occupational Safety and Health. The United States federal agency responsible for conducting research and making recommendations for the prevention of work-related injury and illness |
| NOAEL: | No Observed Adverse Effect Level |
| NOHSC: | National Occupational Health and Safety Commission |
| NTP: | National Toxicology Program (USA) |
| PEL: | Permissible Exposure Limit |
| RTECS: | Registry of Toxic Effects of Chemical Substances (Symyx Technologies) |
| TCL ₀ : | Toxic Concentration Low |
| TD _{LO} : Toxic Dose Low: | Lowest dosage per unit of bodyweight (typically stated in milligrams per kilogram) of a substance known to have produced signs of toxicity in a particular animal species |
| TLV: | Threshold Limit Value (ACGIH): The time weighted average used to describe exposure which is harmless to most of the population when exposed 8 hours per day, 40 hours per week |
| TWA: | (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week |
| SAFEWORK: | Independent statutory agency with primary responsibility to improve occupational health and safety and workers' compensation arrangements across Australia |

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| STEL: | (Short Term Exposure Limit): The average airborne concentration over a 15-minute period which should not be exceeded at any time during a normal eight-hour workday |
| SUSDP: | Standard for the Uniform Scheduling of Drugs & Poisons |
| SUSMP: | Standard for the Uniform Scheduling of Medicines & Poisons |
| UEL: | Upper flammable (explosive) limits in air |
| UN Number: | United Nations Number |
| <i>Literary References</i> | |
| Sources for Data: | Safety Data Sheets from Suppliers |
| | Hazardous Substances Information System (HSIS) – ASCC Australia (on-line) GHS (Globally Harmonised System of Substance Classification & Labelling) REACH (European Chemical Substance Information System) ADG Code 7 th Edition SUSMP N° 13 |

Disclaimer

The material contained in this Safety Data Sheet is provided in good faith and is believed to be correct as at the date hereof. However, it is expected that the individuals receiving the information will exercise their independent judgment in determining its appropriateness for a particular purpose. This company makes no representation as to the accuracy or comprehensiveness of the information and to the full extent allowed by law, excludes all liability whatsoever, whether with respect to negligence or otherwise, for any loss or damage.