

infosafe

**Product Code** 

ST014

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Infosafe No™ 1CHHI Issue Date: August 2014 RE-ISSUED by CHEMSUPP

**SODIUM METASILICATE Pentahydrate** Product Name:

Classified as hazardous

1. Identification

**GHS Product** 

SODIUM METASILICATE Pentahydrate

Identifier

CHEM-SUPPLY PTY LTD (ABN 19 008 264 211) **Company Name** 

38 - 50 Bedford Street GILLMAN **Address** 

SA 5013 Australia

Telephone/Fax Number

Tel: (08) 8440-2000 Fax: (08) 8440-2001

Recommended use of the chemical and Laundry, floor, metal and dairy cleaning, base for detergent formulations, bleaching aid and de-inking

restrictions on use **Other Names** 

Other Information

Name

Sodium silicate, Disodium monosilicate

SODIUM METASILICATE Pentahydrate TG **EMERGENCY CONTACT NUMBER:** +61 08 8440 2000 Business hours: 8:30am to 5:00pm, Monday to Friday.

Chem-Supply Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon Chem-Supply Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of Chem-Supply Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

#### 2. Hazard Identification

**GHS** classification Skin Corrosion/Irritation: Category 1B

of the

Single target organ toxicity - Single Exposure Category 3

substance/mixture

DANGER Signal Word (s)

**Hazard Statement** H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

Pictogram (s) Corrosion, Exclamation mark





P260 Do not breathe dust/fume/gas/mist/vapours/spray. **Precautionary** 

P264 Wash thoroughly after handling. statement -

P271 Use only outdoors or in a well-ventilated area. Prevention

P280 Wear protective gloves/protective clothing/eye protection/face protection. P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

**Precautionary** statement -Response

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse

skin with water/shower.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P363 Wash contaminated clothing before reuse.

P405 Store locked up. **Precautionary** 

statement - Storage

#### 3. Composition/information on ingredients



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**SODIUM METASILICATE Pentahydrate** Product Name:

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Chemical

Characterization

Ingredients **Name** CAS **Proportion Hazard Symbol Risk Phrase** 

> Sodium Metasilicate 10213-79-3 100 % R34, R37

Pentahydrate

Solid

4. First-aid measures

Inhalation If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not

breathing. If breathing is difficult, give oxygen. Immediately obtain medical aid if cough or other

symptoms appear.

Rinse mouth thoroughly with water immediately. Give water to drink. DO NOT induce vomiting. Seek Ingestion

immediate medical assistance.

First rinse with plenty of water, then remove contaminated clothes, rinse again, Seek immediate medical Skin

advice.

**Eve contact** Flush eyes continously with running water until advised to stop by Poision Information Centre, or doctor,

or at least 15 minutes. Seek immediate medical assistance.

Maintain eyewash fountain and safety shower in work area. **First Aid Facilities** 

**Advice to Doctor** Treat symptomatically as for strong alkalis. Consult Poisons Information Centre.

Other Information For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand

0800 764 766) or a doctor.

5. Fire-fighting measures

Hazards from May librate toxic fumes in fire (silicon oxide).

Combustion **Products** 

**Specific Methods** Use extinguishing media most appropriate for the surrounding fire. No limitations to the type of

extinguishing media. Material does not burn.

Specific hazards

arising from the

chemical

**Hazchem Code** 2X

Precautions in Wear SCBA and chemical splash suit. Fully encapsulating, gas-tight suits should be worn for maximum

connection with Fire protection.

6. Accidental release measures

Personal Evacuate the area of all non-essential personnel. Avoid inhalation, contact with skin, eyes and clothing.

**Precautions** 

Personal Protection Wear protective clothing specified for normal operations (see Section 8)

Clean-up Methods -

Sweep up (avoid generating dust) and remove to a suitable, clearly labelled container for disposal in

**Small Spillages** 

accordance with local regulations.

Large Spillages

Seek expert advice on handling and disposal. Clean-up Methods -

7. Handling and storage

Precautions for Safe Avoid generation or accumulation of dusts. Use in well ventilated areas away from all ignition sources.

Handling

In case of insufficient ventilation, wear suitable respiratory equipment. Wash hands and face thoroughly

after working with material.

**Conditions for safe** storage, including

Store in a cool,dry place. Store away from acids. Keep containers securely sealed and protected

against physical damage.

any

incompatabilities

Non corrosive in presence of glass. Corrosiveness

Storage Regulations Refer Australian Standard AS 3780 - 1994 'The storage and handling of corrosive substances'.

8. Exposure controls/personal protection

A time weighted average (TWA) concentration for an 8 hour day, and 5 day week has not been Other Exposure established by Safe Work Australia for this product. There is a blanket limit of 10 mg/m³ for dusts or Information

mists when limits have not otherwise been established.



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**Appropriate** 

In industrial situations maintain the concentrations values below the TWA. This may be achieved by engineering controls process modification, use of local exhaust ventilation, capturing substances at the source, or other

methods.

Respiratory **Protection** 

Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection. Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection,

fit testing, training, maintenance and inspection.

Safety glasses, goggles or faceshield as appropriate. **Eye Protection** 

**Hand Protection** Avoid skin contact when removing gloves from hands, do not touch the gloves outer surface. Dispose of

gloves as hazardous waste. Hand protection should comply with AS 2161, Occupational protective

gloves - Selection, use and maintenance.

**Personal Protective Equipment** 

Final choice of personal protective equipment will depend on individual circumstances and/or according

to risk assessments undertaken.

**Footwear** Safety boots in industrial situations is advisory, foot protection should comply with AS 2210,

Occupational protective footwear - Guide to selection, care and use.

**Body Protection** Wear suitable protective clothing and gloves to prevent skin contact.

**Hygiene Measures** Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other

protective equipment before storing or re-using.

9. Physical and chemical properties

**Form** Solid

White granules. **Appearance** Odour Odourless. **Melting Point** 72.2 °C

Solubility in Water Soluble, precipitated by acids and by alkaline earths and heavy-metal ions.

Solubility in Organic Insoluble in alcohol.

**Solvents** 

1.75 **Specific Gravity** 

pН pH of 1% aqueous solution: 12.6

Non combustible material. **Flammability** 

**Molecular Weight** 212 14

10. Stability and reactivity

**Chemical Stability** Stable under normal use conditons.

Conditions to Avoid Incompatibles.

Incompatible **Materials** 

Acids, fluorine, strong oxidizing agents, zinc, tin, aluminium, copper and alloys.

**Hazardous** 

Silicon and metal oxides.

Decomposition Possibility of

**Products** 

Reacts violently with fluorine.

hazardous reactions

**Hazardous** Will not occur.

**Polymerization** 

11. Toxicological Information

Acute Toxicity - Oral LD50 (rat): 600 mg/kg

May be harmful if swallowed. May cause severe gastrointestinal tract irritation with nausea, vomiting and Ingestion

possible burns.

Irritating to respiratory system. Material is extremely destructive to tissue of the mucous membranes and Inhalation

upper respiratory tract. Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.



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Skin Contact with skin causes irritation and burns, especially if the skin is wet or moist. May be harmful if

absorbed through the skin.

Contact with eyes may cause severe irritation, and possible eye burns. Eye

No evidence of carcinogenic properties. Carcinogenicity

**Chronic Effects** Chronic inhalation may cause effects similar to those listed under Acute - Inhaled.

Mutagenicity No evidence of mutagenic effects.

12. Ecological information

No ecological data available for this product. **Ecotoxicity** 

13. Disposal considerations

Disposal Whatever cannot be saved for recovery or recycling should be disposed of according to relevant local. Considerations

state and federal government regulations.

14. Transport information

Dangerous goods of Class 8 (Corrosive) are incompatible in a placard load with any of the following: **Transport** Class 1, Class 4.3, Class 5, Class 6, if the Class 6 dangerous goods are cyanides and the Class 8 Information

dangerous goods are acids, Class 7; and are incompatible with food and food packaging in any quantity.

3253 U.N. Number

UN proper shipping

name

**DISODIUM TRIOXOSILICATE** 

Transport hazard

class(es)

2X **Hazchem Code Packaging Method** 3.8.8 Ш **Packing Group IERG Number** 37

15. Regulatory information

**Poisons Schedule** 

#### 16. Other Information

Date of preparation August 2009.

or last revision of

SDS

Literature

References

'Standard for the Uniform Scheduling of Medicines and Poisons No. 4', Commonwealth of Australia.

Lewis, Richard J. Sr. 'Hawley's Condensed Chemical Dictionary 13th. Ed.', Rev., John Wiley and Sons,

Inc., NY, 1997.

National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road

and Rail 7th. Ed.', 2007.

'Labelling of Hazardous Workplace Chemicals, Code of Proctice' Safe Work Australia.

Standards Australia 'AS 1940-2004 The Storage and Handling of Flammable and Combustible Liquids. Standards Australia, 'SAA/SNZ HB 76:2010 Dangerous Goods - Initial Emergency Response Guide',

Standards Australia/Standards New Zealand, 2010.

Worksafe Australia, 'Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(2004)]'.

Worksafe Australia, 'Hazardous Substances Information System, 2005'.

Worksafe Australia, 'National Code of Practice for the Labelling of Workplace Hazardous Substances

(2011)'.

Worksafe Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational

Environment [NOHSC:1003(1995)]'.

Contact Person/Point Paul McCarthy Ph. (08) 8440 2000 DISCLAIMER STATEMENT:

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information provided in this data sheet or by our technical representatives.

Empirical Formula & Na2SiO3.5H2O

Structural Formula

...End Of MSDS...

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