



ABN: 81 008 668 371

# MATERIAL SAFETY DATA SHEET

## StrataSol<sup>®</sup> Manganese

### Section 1 – Identification of the Material and Supplier

**Product Name**

StrataSol<sup>®</sup> Manganese

**Other names**

CSBP StrataSol<sup>®</sup> Manganese, Manganese Suspension Concentrate, Liquid Manganese, CSBP Product Code X01

**Recommended use**

Agricultural Applications, Trace Elements

**Company name**

CSBP Limited

**Address**

Kwinana Beach Road, KWINANA

**State**

Western Australia

**Postcode**

6167

**Telephone number**

(08) 9411 8777 (Australia), +61 8 9411 8777 (Overseas)

**Emergency telephone number**

1800 093 333 (Australia), +61 8 9411 8444

### Section 2 – Hazard Identification

Hazard Classification, including a statement of overall hazardous nature

**HAZARDOUS SUBSTANCE.**

StrataSol<sup>®</sup> Manganese is not classified as hazardous according to NOHSC criteria.

**DANGEROUS GOODS.**

StrataSol<sup>®</sup> Manganese is not classified as a dangerous good according to the ADG Code.

### Section 3 – Composition/Information on Ingredients

**Chemical identity of ingredients**

Manganese Carbonate (C-03-Mn)

Non Hazardous Ingredients

**Proportion of ingredients**

64 % (wt/wt)

Remainder

**CAS Number for ingredients**

598-62-9

Not Available

### Section 4 – First Aid Measures

**First Aid Facilities**

Eye wash facilities should be available.

**FIRST AID PROCEDURES FOR DEALING WITH THIS PRODUCT AND EXPOSURE TO IT**

**1. Swallowed**

DO NOT induce vomiting. Immediately wash out mouth with water, and then give water to drink. Seek medical attention.

**2. Eyes**

Flush gently with running water for at least 15 minutes lifting lower and upper eyelids occasionally. Seek medical attention if irritation develops.

**3. Skin**

Remove contaminated clothing and gently flush affected areas with water. Seek medical attention if irritation develops. Launder clothing before reuse.

**4. Inhalation**

If over exposure occurs leave exposure area immediately. If irritation persists, seek medical attention.

**ADVICE TO DOCTOR.**

Treat symptomatically.



ABN: 81 008 668 371

# MATERIAL SAFETY DATA SHEET

## StrataSol<sup>®</sup> Manganese

### Section 5 – Fire Fighting Measures

#### Product flammability

Non flammable. No fire or explosion hazard exists. May evolve toxic fumes when heated to decomposition.

#### Suitable extinguishing media

Non flammable. Prevent contamination of drains or waterways, absorb runoff with sand or similar.

#### Hazard from combustion products

Non flammable. Evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

#### Hazchem Code

None allocated.

### Section 6 – Accidental Release Measures

#### Methods and Materials for containment and clean up

If spilt (bulk), wear splash-proof goggles, PVC/rubber gloves, coveralls and rubber boots. Absorb spill with sand or similar, collect and place in sealable containers for disposal. Prevent spill entering drains or waterways. Caution: Slippery when spilt.

### Section 7 – Handling and Storage

#### 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.

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

Store in cool, dry area, removed from foodstuffs. Ensure containers are labeled, protected from physical damage and sealed when not in use. Also store removed from combustible materials.

### Section 8 – Exposure Controls/Personal Protection

#### National exposure standards

	ES-TWA	ES-STEL	ES-PEAK
Manganese Carbonate (598-62-9)	1 mg/m <sup>3</sup> (dust)	No data available	No data available

#### Engineering controls

Ensure adequate natural ventilation.

#### Personal protective equipment

Wear safety glasses, splash-proof goggles and rubber or PVC gloves. When using large quantities or where heavy contamination is likely, wear coveralls. If spraying, wear a Class P1 (Particulate) Respirator.



ABN: 81 008 668 371

# MATERIAL SAFETY DATA SHEET

## StrataSol<sup>®</sup> Manganese

### Section 9 – Physical and Chemical Properties

Appearance (colour, physical form, shape)

Brown liquid.

Odour

Slight odour.

pH

6.0 – 7.0

Vapour pressure

Not available.

Vapour density

Not available.

Boiling point/range

> 100°C

Freezing/melting point

Not available.

Evaporation rate

Not available.

Solubility

Not available.

Specific gravity

1.78 – 1.82

% Volatiles

Not available.

Flammability

Not Flammable.

Flash point and method of detecting flash point

Not relevant.

Upper and lower flammable (explosive) limits in air

Not relevant.

Ignition temperature

Not available.

### Section 10 – Stability and Reactivity

Reactivity

Compatible with most commonly used materials. Also incompatible with combustible materials.

Decomposition products

May evolve toxic fumes when heated to decomposition.



ABN: 81 008 668 371

# MATERIAL SAFETY DATA SHEET

## StrataSol<sup>®</sup> Manganese

### Section 11 – Toxicological Information

#### HEALTH EFFECTS

Low to moderate toxicity. This product may only present a hazard with direct eye contact, prolonged and repeated skin contact or continual mist inhalation. Chronic over exposure to manganese compounds at high levels may result in manganese poisoning (manganism), with central nervous system damage, however due to the low levels of manganese present and product form (solution), such effects are not anticipated with normal use.

#### Inhalation:

Low irritant. Over exposure at high levels may result in mucous membrane irritation of the nose and throat with coughing. Due to product form (solution), an inhalation hazard is not anticipated.

#### Skin:

Low irritant. Prolonged and repeated contact may result in irritation, skin rash and dermatitis.

#### Eye:

Irritant. Contact may result in lacrimation, irritation, pain, redness and conjunctivitis. Prolonged contact - corneal burns and possible permanent damage.

#### Swallowed:

Low to moderate toxicity. Ingestion may result in nausea, vomiting, gastrointestinal irritation and diarrhea.

#### TOXICITY DATA

Manganese Carbonate (598-62-9)

No LD50 data available for this product.

### Section 12 – Ecological Information

#### Environment

Manganese may exist in the environment as the more soluble (2+) form and/or the less soluble (3+) form. In acidic waters, high levels of dissolved manganese may occur. Occurs naturally (0.085% of earth's crust).

### Section 13 – Disposal Considerations

#### Disposal methods and containers

Contain spill. If liquid absorb with sand, vermiculite or similar. Dispose of to an approved landfill site. Prevent contamination of drains and waterways.

#### Legislation

Dispose of in accordance with relevant local legislation.

### Section 14 – Transport Information

#### UN Number

None allocated.

#### UN Proper shipping name

None allocated.

#### Class and subsidiary risk

None allocated.

#### Packing group

None allocated.

#### EPG

None allocated.

#### Hazchem code

None allocated.



ABN: 81 008 668 371

# MATERIAL SAFETY DATA SHEET

## StrataSol<sup>®</sup> Manganese

### Section 15 – Regulatory Information

#### Australian regulatory information

A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

### Section 16 – Other Information

#### Key / legend to abbreviations and acronyms used in the MSDS

NOHSC	National Occupational Health and Safety Commission
SUSDP	Standard for the Uniform Scheduling of Drugs and Poisons
ES-TWA	Exposure Standard – Time weighted average
ES-STEL	Exposure Standard – Short term exposure level
ES-Peak	Exposure Standard – Peak level
LC <sub>50</sub>	Lethal concentration 50, median lethal concentration
LD <sub>50</sub>	Lethal dose 50. The single dose of a substance that causes the death of 50% of an animal population from exposure to the substance by any route other than inhalation
% (wt/wt)	Percent amount on a weight per weight basis
mg/m <sup>3</sup>	Milligrams per cubic metre
mg/kg	Milligrams per kilogram
pH	relates to hydrogen ion concentration - this value will relate to a scale of 0 - 14, where 0 is highly acidic and 14 is highly alkaline

### Important Notes

1. To the best of our knowledge this document complies with the National Code of Practice for the Preparation of Material Safety Data Sheets 2<sup>nd</sup> Edition [NOHSC:2011 (2003)].
2. This material safety data sheet summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this material safety data sheet and consider the information in the context of how the product will be handled and used in the workplace, including in conjunction with other products.
3. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact the Safety and Emergency Services Department, CSBP Limited on (08) 9411 8777 (Australia), +61 8 9411 8777 (Overseas).
4. Our responsibility for products sold, is subject to our terms and conditions, a copy of which is sent to our customers, and is also available on request.
5. CSBP reserves the right to make change to material safety data sheets without notice.