

# SAFETY DATA SHEET

## Campbells Thiocal

Date of Issue: May 2016

### 1. IDENTIFICATION

<b>Product Identifier:</b>	<b>Campbells Thiocal</b>
<b>Other Means of Identification:</b>	<b>Calcium thiosulphate solutions; calcium thiosulphate, 20%≤conc&lt;30%, aqueous solutions; thiosulfuric acid (H<sub>2</sub>S<sub>2</sub>O<sub>3</sub>), calcium salt (1:1), 20%≤conc&lt;30%, aqueous solutions; calcium thiosulfate, 20%≤conc&lt;30%, aqueous solutions; CaTs (=calcium thiosulphate, 20%≤conc&lt;30%, aqueous solutions)</b>
<b>Recommended Use of the Chemical and Restrictions on Use:</b>	Fertiliser
<b>Details of Manufacturer or Importer:</b>	Campbells Fertilisers Australasia 18 Raymond Road, Laverton North, Victoria, 3026 Phone: (03) 9931 2211 Fax: (03) 9931 2201 <a href="http://www.campbellsfert.com.au">www.campbellsfert.com.au</a>
<b>Emergency Telephone Number:</b>	(03) 9931 2211 (business hours only 8.30 am to 5.00 pm) 0418 350 726 (after business hours)

### 2. HAZARD(S) IDENTIFICATION

<b>GHS Classification:</b>	Not classified as hazardous according to the GHS.
<b>ADG Classification:</b>	Based on available information, not classified as a Dangerous Good under the Australian Code for the Transport of Dangerous Goods by Road and Rail, 7 <sup>th</sup> Edition
<b>SUSMP Classification:</b>	Not scheduled

### 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Component:	CAS Number:	Concentration:
Calcium thiosulphate	10124-41-1	20%<C<30%

### 4. FIRST AID MEASURES

#### Description of Necessary First Aid Measures:

<b>Inhalation:</b>	Remove casualty to fresh air. If respiratory problems occur, seek medical advice.
<b>Skin Contact:</b>	Flush skin with water. Seek medical advice if irritation persists.

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**Eye Contact:** Flush eyes with water. Do not apply neutralizing agents. Seek advice from an ophthalmologist if irritation persists.

**Ingestion:** Rinse mouth with water. Seek medical advice if you feel unwell.

**First Aid Facilities:** Ensure washing facilities, including an eyewash, are available and maintained.

### Symptoms caused by Exposure:

**Inhalation:** No effects known.

**Skin Contact:** No effects known.

**Eye Contact:** No effects known.

**Ingestion:** After ingestion of high quantities, symptoms may include gastrointestinal complaints, diarrhea.

### Medical Attention and Special Treatment:

None specified.

## 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Equipment:** Use any means suitable for extinguishing surrounding fire.

**Specific Hazards arising from the Chemical:** On heating/burning, release of toxic and corrosive gases/vapours (sulphur oxides).

**Special Protective Equipment and Precautions for Fire Fighters:** Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water. Wear gloves, safety glasses, protective clothing. Upon heat/fire exposure, wear compressed air/oxygen apparatus.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures:** No naked flames.  
Non-emergency personnel: wear appropriate personal protective equipment as specified in Section 8.  
Emergency responders: wear gloves, safety glasses, protective clothing as specified in Section 8.

**Environmental Precautions:** Contain released substance, pump into suitable containers. Plug the leak, cut off the supply. Take account of toxic/corrosive precipitation water.

**Methods and Materials for Containment and Cleaning Up:** Take up liquid spill into inert absorbent material, e.g. sand/earth. Scoop absorbed substance into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

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### 7. HANDLING AND STORAGE

<b>Precautions for Safe Handling:</b>	Keep away from naked flames/heat. Observe normal hygiene standards. Keep container tightly closed. Remove contaminated clothing immediately.
<b>Conditions for Safe Storage, including any Incompatibilities:</b>	Storage temperature <49°C. Keep container in a well-ventilated place. Keep out of direct sunlight. Meet the legal requirements. Keep away from heat sources, (strong) acids, oxidizing agents. Suitable packaging material: no data available. Non suitable packaging material: copper, zinc, bronze, carbon steel.

### 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Exposure Standards:**

**DNEL - Workers**  
calcium thiosulphate

<i>Effect level (DNEL/DMEL)</i>	<i>Type</i>	<i>Value</i>
DNEL	Long-term systemic effects inhalation	351 mg/m <sup>3</sup>

**DNEL – General Population**  
calcium thiosulphate

<i>Effect level (DNEL/DMEL)</i>	<i>Type</i>	<i>Value</i>
DNEL	Long-term systemic effects inhalation	104 mg/m <sup>3</sup>
	Long-term systemic effects oral	14 mg/kg bw/day

**PNEC**  
calcium thiosulphate

<i>Compartments</i>	<i>Value</i>
Fresh water	0.83 mg/L
Marine water	0.083 mg/L
STP	106.5 mg/L

**Biological Monitoring:** Not available.

**Control Banding:** Not available.

**Engineering Controls:** Keep away from naked flames/heat. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

**Individual Protection Measures e.g. Personal Protective Equipment** Observe normal hygiene standards. Keep container tightly closed. Do not eat, drink or smoke during work.

*Eye and Face Protection:*

Wear safety glasses.

*Skin Protection:*

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**(PPE):** Wear neoprene gloves and protective clothing.  
*Respiratory Protection:*  
 Respiratory protection not required in normal conditions.  
*Thermal Hazards:*  
 None specified.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Colourless liquid
<b>Odour:</b>	Mild odour
<b>Vapour Pressure (mm Hg):</b>	Not available
<b>Relative Density:</b>	1.25
<b>Absolute Density:</b>	1250 kg/m <sup>3</sup>
<b>Boiling Point:</b>	Not available
<b>Melting Point:</b>	Not available
<b>Solubility (water):</b>	Complete
<b>Specific Gravity:</b>	Not available
<b>pH:</b>	6.5-8.0
<b>Flash Point:</b>	Not applicable
<b>Flammability:</b>	Non combustible
<b>Auto-Ignition Temperature:</b>	Not applicable
<b>Octanol/Water Partition Coefficient:</b>	Not available
<b>Dynamic viscosity:</b>	0.0026 mPa.s; 25°C

### 10. STABILITY AND REACTIVITY

<b>Chemical Stability:</b>	Stable under normal conditions of storage and handling.
<b>Possibility of Hazardous Reactions:</b>	No data available
<b>Conditions to Avoid:</b>	Keep away from naked flames/heat.
<b>Incompatible Materials:</b>	(Strong) acids, oxidizing agents, copper, zinc, bronze, carbon steel.
<b>Hazardous Decomposition Products:</b>	Reacts with (some) acids: release of toxic and corrosive gases/vapours (sulphur oxides). On heating/burning: release of toxic and corrosive gases/vapours (sulphur oxides).

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### 11. TOXICOLOGICAL INFORMATION

#### Toxicological Information of the Mixture:

**Acute Toxicity:**

*For calcium thiosulphate solutions*  
No data available

*For calcium thiosulphate*

LD<sub>50</sub> Rat (female) Oral >2000 mg/kg bw (OECD425, experimental value)

LD<sub>50</sub> Rabbit (male, female) Dermal (24 h) >2000 mg/kg bw (OECD402, read-across value)

LC<sub>50</sub> Rat (male, female) Inhalation Dust (4 h) 5.5 mg/L air (OECD403, read-across value)

LC<sub>50</sub> Rat (male, female) Inhalation Dust (1 h) >22 mg/L (OECD403, read-across value)

LC<sub>50</sub> Rat (male, female) Inhalation Aerosol (4 h) 2.6 mg/L air (OECD403, read-across value)

**Skin**

**Corrosion/Irritation:**

*For calcium thiosulphate solutions*  
No data available

*For calcium thiosulphate*

Skin (4 h) Rabbit - Not irritating (OECD 404, read-across value, time point: 24, 48, 72 h)

**Serious Eye**

**Damage/Irritation:**

*For calcium thiosulphate solutions*  
No data available

*For calcium thiosulphate*

Eye Rabbit - Not irritating (OECD 405, read-across value, time point: 24, 48, 72 h)

**Respiratory or Skin**

**Sensitisation:**

*For calcium thiosulphate solutions*  
No data available

*For calcium thiosulphate*

Dermal (on the ears) Mouse (female) - Not sensitizing (OECD 429, read-across value)

**Germ Cell**

**Mutagenicity:**

*In vivo*

*For calcium thiosulphate solutions*  
No data available

**Carcinogenicity:**

*For calcium thiosulphate solutions*  
No data available

*For calcium thiosulphate*

Oral (drinking water), mouse (male/female) (24 months) >2500 mg/kg

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bw/day (other method, read-across value). No effect.

### Reproductive Toxicity:

*For calcium thiosulphate solutions*  
No data available

*For calcium thiosulphate*

#### Effects on fertility:

NOAEL (P/F1/F2) rat (male/female) (104 wks) 1493 mg/kg bw/day (other method, read-across value)

### Specific Target Organ Toxicity (STOT) - Single Exposure:

No data available

### Specific Target Organ Toxicity (STOT) - Repeated Exposure:

*For calcium thiosulphate solutions*  
No data available

*For calcium thiosulphate*

Oral (repeated exposure), NOAEL (local effects) rat (male/female) 169 mg/kg bw/day (other method, read-across value). No effect.

Oral (repeated exposure), NOAEL (systemic effects) rat (male/female) 1493 mg/kg bw/day (other method, read-across value). No effect.

### Aspiration Hazard:

No data available

### Likely Routes Of Exposure

**Inhalation:** No effects known.

**Skin:** No effects known.

**Eye:** No effects known.

**Ingestion:** After ingestion of high quantities, symptoms may include gastrointestinal complaints, diarrhea.

### Delayed and Immediate Effects from Short and Long Term Exposure:

None known.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity:

*For calcium thiosulphate solutions*  
No data available

*For potassium thiosulphate*

#### Acute toxicity to fish:

LC<sub>50</sub> *Lepomis macrochirus* (96 h) 510 mg/L (static system, fresh water, other method, read-across value, nominal concentration)

#### Acute toxicity to invertebrates:

EC<sub>50</sub> *Daphnia magna* (48 h) 230 mg/L (static system, fresh water, other method, read-across value, nominal concentration)

#### Toxicity to algae and other aquatic plants:

EC<sub>50</sub> *Pseudokirchneriella subcapitata* (72 h) >100 mg/L (static system, fresh water, OECD 201, read-across value, GLP)

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**Persistence and Degradability:** Biodegradability: not applicable  
**Bioaccumulative Potential:** Not bioaccumulative  
**Mobility in Soil:** No (test) data available

### 13. DISPOSAL CONSIDERATIONS

**Product Disposal:** Remove waste in accordance with local and/or national regulations. Treat using the best available techniques before discharge into drains or the aquatic environment.  
**Container Disposal:** Dispose of according to state, federal and local regulations.

### 14. TRANSPORT INFORMATION

**Classification:** Based on available information, not classified as Dangerous Goods for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail, 7<sup>th</sup> Edition.  
**UN Number:** None allocated  
**Proper Shipping Name or Technical Name:** None allocated  
**Transport Hazard Class:** None allocated  
**Packing Group:** None allocated  
**Environmental Hazards for Transport Purposes:** None allocated  
**Special Precautions for User:** None allocated  
**HAZCHEM Code:** None allocated

### 15. REGULATORY INFORMATION

**SUSMP:** Not scheduled  
**APVMA:** Exempt from registration  
**State Departments of Agriculture / Primary Industries:** Registration not required  
**Australian Inventory of Chemical** All components listed



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**Substances (AICS):**  
**Toxic Substance – NZ** Exempt

### 16. OTHER INFORMATION

**Edition:** Initial edition  
**Revision Due:** May 2021  
**Reason for Revision:** Initial version  
**Preparation Information:** Prepared by Campbells Fertilisers Australasia  
**Data Sources:** Supplier SDS  
**Trademark Information:** Aqua-Fert is a Registered Trademark of Campbells Fertilisers Australasia

#### Glossary:

**ACGIH** American Conference of Government Industrial Hygienists  
**APVMA** Australian Pesticides and Veterinary Medicines Authority  
**CAS** Chemical Abstract Services number, used to uniquely identify chemical compounds  
**NOHSC** National Occupational Health and Safety Commission  
**PPE** Personal protective equipment  
**SUSMP** Standard for the Uniform Scheduling of Medicines and Poisons

This SDS summarises our best knowledge of the health and safety hazard information available for this product and how to safely handle and use it. Since the use of this information and the conditions of the use of this product are not under the control of Campbell's Fertilisers, it is the user's responsibility to determine conditions of safe use of the product.

END OF SDS