



SAFETY DATA SHEET

Campbells Thio K

Date of Issue: May 2016

1. IDENTIFICATION

Product Identifier: Campbells Thio K

Other Means of Identification: Potassium thiosulphate solution; potassium thiosulphate, conc=50%, aqueous solution; thiosulfuric acid (H₂S₂O₃), dipotassium salt, conc=50%, aqueous solution; thiosulfuric acid, dipotassium salt, conc=50%, aqueous solution; potassium hyposulfite, conc=50%, aqueous solution; potassium thiosulfate, conc=50%, aqueous solution.

Recommended Use of the Chemical and Restrictions on Use: Fertiliser

Details of Manufacturer or Importer: Campbells Fertilisers Australasia
18 Raymond Road, Laverton North, Victoria, 3026
Phone: (03) 9931 2211
Fax: (03) 9931 2201
www.campbellsfert.com.au

Emergency Telephone Number: (03) 9931 2211 (business hours only 8.30 am to 5.00 pm)
0418 350 726 (after business hours)

2. HAZARD(S) IDENTIFICATION

GHS Classification: Not classified as hazardous according to the GHS.

ADG Classification: Based on available information, not classified as a Dangerous Good under the Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th Edition

SUSMP Classification: Not scheduled

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Component:	CAS Number:	Concentration (%):
Potassium thiosulphate	10294-66-3	50

4. FIRST AID MEASURES

Description of Necessary First Aid Measures:

Inhalation: Remove casualty to fresh air. If respiratory problems occur, seek medical advice.

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Skin Contact: Flush skin with water. Seek medical advice if irritation persists.
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. 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.

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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.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Keep away from naked flames/heat. Observe normal hygiene standards. Keep container tightly closed.

Conditions for Safe Storage, including any Incompatibilities: Keep container in a well-ventilated place. Keep out of direct sunlight. Meet the legal requirements. Keep away from heat sources, (strong) acids. Suitable packaging material: stainless steel, polypropylene, HDPE. Non suitable packaging material: lead.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards:

DNEL - Workers

potassium thiosulphate

<i>Effect level (DNEL/DMEL)</i>	<i>Type</i>	<i>Value</i>
DNEL	Long-term systemic effects inhalation	449 mg/m ³

DNEL – General Population

potassium thiosulphate

<i>Effect level (DNEL/DMEL)</i>	<i>Type</i>	<i>Value</i>
DNEL	Long-term systemic effects inhalation	133 mg/m ³
	Long-term systemic effects oral	17 mg/kg bw/day

PNEC

potassium thiosulphate

<i>Compartments</i>	<i>Value</i>
Fresh water	1 mg/L
Marine water	0.1 mg/L
STP	128.3 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.

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Individual Protection Measures e.g. Personal Protective Equipment (PPE):	<p>Observe normal hygiene standards. Keep container tightly closed. Do not eat, drink or smoke during work.</p> <p><i>Eye and Face Protection:</i> Wear safety glasses.</p> <p><i>Skin Protection:</i> Wear neoprene gloves and protective clothing.</p> <p><i>Respiratory Protection:</i> Respiratory protection not required in normal conditions.</p> <p><i>Thermal Hazards:</i> None specified.</p>
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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colourless to light yellow liquid
Odour:	Mild unpleasant odour
Vapour Pressure (mm Hg):	Not available
Relative Density:	1.5
Absolute Density:	1460 kg/m ³
Boiling Point:	106°C
Melting Point:	Not available
Solubility (water):	Complete
Specific Gravity:	Not available
pH (0.1M aqueous solution):	7.0-8.2; 50%
Flash Point:	Not applicable
Flammability:	Non combustible
Auto-Ignition Temperature:	Not applicable
Octanol/Water Partition Coefficient:	Not available

10. STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal conditions of storage and handling.
Possibility of Hazardous Reactions:	No data available
Conditions to Avoid:	Keep away from naked flames/heat.
Incompatible Materials:	(Strong) acids, lead.
Hazardous Decomposition Products:	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:	<i>For potassium thiosulphate solution</i> LD ₅₀ Rat Oral >5000 mg/kg LD ₅₀ Rabbit Dermal >2000 mg/kg <i>For potassium thiosulphate</i> LD ₅₀ Rat (male, female) Oral >2500 mg/kg bw (OECD401, experimental value) LD ₅₀ Rabbit (male, female) Dermal (24 h) >2000 mg/kg bw (OECD402, experimental value) LD ₀ Rat (male, female) Inhalation Aerosol (4 h) 2.6 mg/L (OECD403, experimental value) LD ₅₀ Rat (male, female) Inhalation Aerosol (4 h) >2.6 mg/L (OECD403, experimental value)
Skin Corrosion/Irritation:	<i>For potassium thiosulphate solution</i> No data available <i>For potassium thiosulphate</i> Skin (4 h) Rabbit - Not irritating (OECD 404, read-across value, time point: 24, 48, 72 h)
Serious Eye Damage/Irritation:	<i>For potassium thiosulphate solution</i> No data available <i>For potassium thiosulphate</i> Eye Rabbit - Not irritating (OECD 405, read-across value, time point: 1, 24, 48, 72 h)
Respiratory or Skin Sensitisation:	<i>For potassium thiosulphate solution</i> No data available <i>For potassium thiosulphate</i> Dermal (on the ears) Mouse (female) - Not sensitizing (OECD 429, read-across value)
Germ Cell Mutagenicity:	<u><i>In vitro</i></u> <i>For potassium thiosulphate solution</i> No data available <i>For potassium thiosulphate</i> Negative with metabolic activation, negative without metabolic activation (OECD 476, mouse (lymphoma L5178Y cells) read-across value) <u><i>In vivo</i></u>

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For potassium thiosulphate solution
No data available

For potassium thiosulphate
No data available

Carcinogenicity:

For potassium thiosulphate solution
No data available

For potassium thiosulphate
Oral (drinking water), mouse (male/female) (24 months) >2500 mg/kg bw/day (other method, read-across value)

Reproductive Toxicity:

For potassium thiosulphate solution
No data available

For potassium thiosulphate
Developmental toxicity:
NOAEL rat (8 d) 1320 mg/kg bw/day (other method, read-across value)
Effects on fertility:
NOAEL (F1) rat (male/female) (104 wks) 1910 mg/kg bw/day (other method, read-across value)
NOAEL (local effects) rat (male/female) (104 wks) 216 mg/kg bw/day (other method, read-across value)
NOAEL rat (8 d) 1320 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 potassium thiosulphate solution*
No data available

For potassium thiosulphate
Oral (repeated exposure), NOAEL (local effects) rat (male/female) (104 wks) 216 mg/kg bw/day (other method, read-across value)
Oral (repeated exposure), NOAEL (systemic effects) rat (male/female) (104 wks) 1910 mg/kg bw/day (other method, read-across value)

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.

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Delayed and Immediate Effects from Short and Long Term Exposure:
None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity:	<p><i>For potassium thiosulphate solution</i></p> <p><u>Acute toxicity to fish:</u> LC₅₀ <i>Cyprinodon variegatus</i> (96 h) >1000 mg/L (static system, literature study, solution ≥50%)</p> <p><i>For potassium thiosulphate</i></p> <p><u>Acute toxicity to fish:</u> LC₅₀ <i>Oncorhynchus mykiss</i> (96 h) 770 mg/L (static system, fresh water, other method, read-across value, nominal concentration)</p> <p><u>Acute toxicity to invertebrates:</u> EC₅₀ <i>Daphnia magna</i> (48 h) 230 mg/L (static system, fresh water, other method, read-across value, nominal concentration)</p> <p><u>Toxicity to algae and other aquatic plants:</u> EC₅₀ <i>Pseudokirchneriella subcapitata</i> (72 h) >100 mg/L (static system, fresh water, OECD 201, read-across value, GLP)</p>
Persistence and Degradability:	Biodegradability: not applicable
Bioaccumulative Potential:	Does not contain bioaccumulative components
Mobility in Soil:	No (test) data available

13. DISPOSAL CONSIDERATIONS

Product Disposal:	Recycle/reuse. Remove waste in accordance with local and/or national regulations. Do not discharge into the sewer. Do not discharge into surface water.
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 th Edition.
UN Number:	None allocated
Proper Shipping Name or Technical Name:	None allocated
Transport Hazard	None allocated

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Class:
Packing Group: None allocated
Environmental Hazards for Transport Purposes:
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 Substances (AICS): All components listed
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



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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