



SAFETY DATA SHEET

CAMPBELLS THIO-MAG

Date of Issue: December 2016

1. IDENTIFICATION

Product Identifier: CAMPBELLS THIO-MAG

Other Means of Identification: Magnesium thiosulfate

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)
Poisons Information Centre 131126

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: Exempt from Poison Scheduling

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Component:	CAS Number:	Proportion (%):
Magnesium thiosulfate	10124-53-5	20-25
Magnesium sulfate	7487-88-9	1.5-2

4. FIRST AID MEASURES

Description of Necessary First Aid Measures:

Inhalation: Remove victim from contaminated atmosphere. If breathing is laboured, administer oxygen. If breathing has ceased, clear airway and start CPR. Obtain medical attention.

Skin Contact: Immediately flush with large quantities of water. Remove contaminated clothing under a safety shower. Continue rinsing. Obtain medical attention

SAFETY DATA SHEET

CAMPBELLS THIO-MAG

Date of Issue: December 2016

if irritation occurs.

Eye Contact: Immediately flush with large quantities of water for 15 minutes. Hold eyelids apart during irrigation to ensure thorough flushing of the entire area of the eye and lids. Obtain medical attention if irritation occurs.

Ingestion: If victim is conscious, give 2 to 4 glasses of water and induce vomiting by touching finger to back of throat. Obtain medical attention.

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

Symptoms caused by Exposure: No known chronic effects.

Inhalation: No data available

Skin: Repeated or prolonged skin contact may cause skin irritation.

Eye: Eye contact may cause eye irritation.

Ingestion: Ingestion may irritate the gastrointestinal tract.

Medical Attention and Special Treatment: No data available

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Equipment: Not flammable, use media suitable for combustibles involved in fire.

Specific Hazards arising from the Chemical: Heating (flames) of closed or sealed containers may cause violent rupture of container due to thermal expansion of compressed gases. Heating to dryness may cause the release of sulfur and oxides of sulfur and magnesium sulphate.

Special Protective Equipment and Precautions for Fire Fighters: Firefighters should wear self-contained breathing apparatus (SCBA) and full fire-fighting turnout gear. Keep containers/storage vessels in fire area cooled with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: Use personal protective equipment specified in Section 8. Isolate the release area and deny entry to unnecessary, unprotected and untrained personnel.

Environmental Precautions: Do not allow entry into waterways due to potential aquatic toxicity.

SAFETY DATA SHEET

CAMPBELLS THIO-MAG

Date of Issue: December 2016

Methods and Materials for Containment and Cleaning Up:

Small Release: Confine and absorb small releases with sand, earth or other inert absorbent. Shovel up absorbed material and place in drums for disposal as a chemical waste or recycle as a fertilizer as the original product was intended.

Large Release: Shut off release if safe to do so. Dike spill area with earth, sand or other inert absorbents to prevent runoff into surface waterways (potential aquatic toxicity), storm drains or sewers. Recover as much of the spilled product as possible using portable pump and hoses. Use as originally intended or dispose of as a chemical waste. Treat remaining material as a small release (above).

7. HANDLING AND STORAGE

Precautions for Safe Handling:

Avoid contact with eyes. Use only in a well-ventilated area. Wash thoroughly after handling. Avoid prolonged or repeated breathing of vapours. Avoid prolonged or repeated contact with the skin.

Conditions for Safe Storage, including any Incompatibilities:

Store in well-ventilated areas. Do not store combustibles in the area of storage vessels. Keep away from any sources of heat or flame. Store totes and smaller containers out of direct sunlight at moderate temperatures. (See Section 10 for materials of construction.)

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards:

Chemical	OSHA PELs		ACGIH TLVs	
	TWA	STEL/C	TWA	STEL
Magnesium thiosulfate	None	None	None	None
Magnesium sulfate	None	None	None	None
Water	None	None	None	None

Biological Monitoring:

Not specified

Control Banding:

Not specified

Engineering Controls:

Use adequate exhaust ventilation to prevent inhalation of product vapours. Keep eye wash/safety showers in areas where product is commonly handled.

Individual Protection Measures e.g. Personal Protective Equipment (PPE):

There are no known hazards associated with this product when used as recommended, however common good industrial hygiene practices should be followed, such as washing thoroughly after handling and before eating or drinking.

Respiratory Protection:

None generally required. If conditions exist where mist may be generated, a NIOSH/MSHA approved mist respirator should be worn.

Skin Protection:

Neoprene rubber gloves and apron should be worn to prevent repeated or prolonged contact with the liquid. Wash contaminated clothing prior to reuse.

Eye Protection:

Chemical goggles and a full face shield.

Thermal Hazards:

SAFETY DATA SHEET

CAMPBELLS THIO-MAG

Date of Issue: December 2016

None known.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, colourless liquid
Odour:	Slight sulfur odor
Vapour Pressure:	Not determined
Relative Density:	1.25 (10.4 lb/gal) (Typical)
Vapour Density:	Not determined
Boiling Point:	Not determined
Melting/Freezing Point:	Salt-out temperature <25°F (<-3.9°C) Typical
Solubility (in water):	Complete
pH:	6.5 - 9.0 (Typical)
Flash Point:	Not applicable
Flammability (explosive) Limits:	Not applicable
Auto-Ignition Temperature:	Not applicable
Octanol/Water Partition Coefficient:	Data not available
Thermal decomposition:	Not determined

10. STABILITY AND REACTIVITY

Reactivity:	Avoid interaction with heat (flames), oxidizers, acids or alkalis (see details below in this section).
Chemical Stability:	Product is stable under normal (ambient) temperatures and pressure.
Possibility of Hazardous Reactions:	Strong oxidizers such as nitrates, or chlorates can cause explosive mixtures if heated to dryness.
Conditions to Avoid:	High temperatures, fire conditions.
Incompatible Materials:	Strong oxidizers (See 'Possibility of Hazardous Reactions' above). Acids will cause the release of sulfur dioxide, a severe respiratory irritant. Magnesium thiosulfate is not compatible with copper, zinc or their alloys including brass, bronze or galvanized materials. These materials should not be utilized in handling systems or storage containers for this product.
Hazardous Decomposition Products:	Heating this product will evolve sulfur dioxide. Heating to dryness will cause the production of magnesium sulfate, sulfur and oxides of sulfur. Sulfur dioxide is a severe respiratory irritant.

11. TOXICOLOGICAL INFORMATION

Toxicological Information of the Mixture: No data available

Toxicological Information of the Main Substances found in the Mixture:

Acute Toxicity: *Oral:*
Intraperitoneal-Rat LD₅₀: 805 mg/kg (magnesium thiosulfate)

SAFETY DATA SHEET

CAMPBELLS THIO-MAG

Date of Issue: December 2016

	Intravenous-Rat LD ₅₀ : 103 mg/kg (magnesium thiosulfate)
	<i>Dermal:</i>
	Subcutaneous-Mouse LD ₅₀ : 850 mg/kg (magnesium thiosulfate)
	<i>Inhalation:</i>
Skin	No data available
Corrosion/Irritation:	No data available
Serious Eye Damage/Irritation:	No data available
Respiratory or Skin Sensitisation:	No data available
Germ Cell Mutagenicity:	No data available
Carcinogenicity:	Not listed as a carcinogen by NTP, IARC or OSHA
Reproductive Toxicity:	No data available
Specific Target Organ Toxicity (STOT) - Single Exposure:	No data available
Specific Target Organ Toxicity (STOT) - Repeated Exposure:	No data available
Aspiration Hazard:	No data available
Likely Routes Of Exposure	
Inhalation:	No data available
Skin:	Repeated or prolonged skin contact may cause skin irritation.
Eye:	Eye contact may cause eye irritation.
Ingestion:	Ingestion may irritate the gastrointestinal tract.

12. ECOLOGICAL INFORMATION

Ecotoxicity:	No data available
Persistence and Degradability:	No data available
Bioaccumulative Potential:	No data available
Mobility in Soil:	No data available
Other Adverse Effects:	No data available

13. DISPOSAL CONSIDERATIONS

Product Disposal: Dispose in a safe manner in accordance with local/national regulations.

SAFETY DATA SHEET

CAMPBELLS THIO-MAG

Date of Issue: December 2016

Container Disposal: Dispose in a safe manner in accordance with local/national 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, 7th Edition.

UN Number: Not applicable

Proper Shipping Name or Technical Name: Not applicable

Transport Hazard Class: Not applicable

Packing Group: Not applicable

Environmental Hazards for Transport Purposes: Not applicable

Special Precautions for User: Not applicable

HAZCHEM Code: Not applicable

15. REGULATORY INFORMATION

SUSMP: Exempt from Poison Scheduling

APVMA: Exempt from registration

State Departments of Agriculture / Primary Industries: Registration not required

Australian Inventory of Chemical Substances (AICS): All components listed

16. OTHER INFORMATION

Edition: Initial edition

Revision Due: December 2021

Reason for Revision: Initial version

Preparation Information: Prepared by Campbells Fertilisers Australasia

Data Sources: Supplier SDS

SAFETY DATA SHEET

CAMPBELLS THIO-MAG

Date of Issue: December 2016

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
IARC	International Agency for Research on Cancer
MSHA	Mine Safety and Health Administration
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal protective equipment
STEL	Short Term Exposure Limit
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
TLV	Threshold Limit Value
TWA	Time Weighted Average

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