



MATERIAL SAFETY DATA SHEET

Double Trace

Date of Issue: December 22, 2011

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND SUPPLIER

Product Name: Double Trace

Other Names: None

Recommended Use: Fertiliser

Supplier: Campbells Fertilisers Australasia

Address: 16 Raymond Road, Laverton North, Victoria, 3026

Telephone: (03) 9931 2211

Facsimile: (03) 9931 2201

Website: www.campbellsfert.com.au

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

2. HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE - NON-DANGEROUS GOODS (ROAD AND RAIL)

Hazard Designation: Classified as hazardous according to the criteria of NOHSC.

Risk Phrases: R22 Harmful if swallowed.
R41 Risk of serious damage to eyes.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases: S2 Keep out of reach of children.
S22 Do not breathe dust.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S39 Wear eye/face protection.
S46 If swallowed, contact a doctor or Poisons Information Centre immediately and show container or label.
S60 This material and its container must be disposed of as hazardous waste.
S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

ADG Classification: This product is not classified as a Dangerous Good under the Australian Code for the Transport of Dangerous Goods by Road and Rail., 7th Edition. For transport by sea or air, see section 14.

SUSMP Classification: Schedule 6 (S6) Poison



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3. COMPOSITION / INFORMATION ON INGREDIENTS

Component:	CAS Number:	Proportion (%):
Zinc sulphate monohydrate	7446-19-7	40-50
Manganese sulphate monohydrate	10034-96-5	40-55

4. FIRST AID MEASURES

If exposed, concerned or if symptoms persist, get medical attention/advice. If medical advice is needed, have product container or label at hand.

Inhalation: If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

Skin Contact: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Eye Contact: If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

Ingestion: For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.

First Aid Facilities: Eye wash facilities and safety shower should be available.

Medical Personnel Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Use water jets, foam or carbon dioxide.

Hazards from Combustion Products: Non flammable. May evolve toxic gases (zinc/sulphur oxides) when heated to decomposition.

Precautions for Firefighters and Special Protective Equipment: Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. 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. Prevent contamination of drains or waterways.

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6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Contact emergency services where appropriate. Use personal protective equipment. Clear area of all unprotected personnel. Prevent spill entering drains or waterways.
Methods and Materials for Containment and Clean Up	Contain spillage, then collect and place in suitable containers for reuse or disposal. Avoid generating dust.

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 a cool, dry, well ventilated area, removed from lead, calcium, and strontinum salts, borax, alkali carbonates and hydroxides, silver protein, tannins and foodstuffs. Ensure product is adequately labelled, protected from physical damage and sealed when not in use. Do not allow to come in contact with water, either from rain, condensation or the surface on which stored. Bagged fertilisers should be stored under cover and out of direct sunlight (which degrades woven polypropylene packs). If stored in the open, do so for short periods only, and cover with a tarpaulin. If stacking is necessary, bulk bags should be stored in a stable manner, preferably in a pyramidal style. Bulk bags should not be stacked more than two high for bags containing 1 000 kg or more, or more than four high for bags containing up to 500 kg. The Pallet Capacity Rating (design weight) should not be exceeded on the bottom tier for other packs. High stacking should be avoided as pressure promotes caking. Store away from farm chemicals, e.g. insecticides, fungicides and herbicides.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards:	Manganese, dust & compounds (as Mn): TWA 1 mg/m ³ (reference SWA (AUS))
Biological Limit Values	No biological limit allocated
Engineering Controls:	Avoid inhalation. Use in well-ventilated areas.
Personal Protective Equipment:	Wear dust-proof goggles and PVC or rubber gloves. When using large quantities or where heavy contamination is likely, wear: coveralls. At high dust levels, wear: a Powered Air Purifying Respirator (PAPR) with Class P3 (Particulate) filter or a Full-face Class P3 (Particulate) respirator. Where an inhalation risk exists, wear: a Class P1 (Particulate) respirator.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White powder
Odour:	Slight Odour
Vapour Pressure:	Not available
Vapour Density:	Not available
Boiling Point:	Not available
Freezing/Melting Point:	Not available
Solubility:	Soluble in water
Density:	Not available
pH:	Not available

10. STABILITY AND REACTIVITY

Chemical Stability:	Stable under recommended conditions of storage.
Conditions to Avoid:	Avoid heat, sparks, open flames and other ignition sources.
Incompatible Materials:	Incompatible with lead, calcium, and strontinum salts, borax, alkali carbonates and hydroxides, silver, protein, and tannins. Strong acids and alkalis, peroxides.
Hazardous Decomposition Products:	May evolve toxic gases (zinc/ sulphur oxides) when heated to decomposition.
Hazardous Reactions:	Polymerization is not expected to occur.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary:	Low to moderate toxicity - irritant. This product has the potential to cause adverse health effects with over exposure. Use safe work practices to avoid eye or skin contact and inhalation. When handled in small quantities the potential for dust inhalation and adverse health effects may be reduced.
Eye:	Irritant. Contact may result in irritation, lacrimation, pain, redness and blurring or dimness of vision.
Inhalation:	Low to moderate irritant. Over exposure may result in irritation of the nose and throat, coughing, dizziness and headache.
Skin:	Irritant. Contact may result in irritation, redness, pain and rash.
	Low to moderate toxicity. Ingestion may result in gastrointestinal irritation,



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Ingestion: nausea, vomiting, headache and diarrhoea.

Toxicity Data: Zinc sulphate monohydrate (7446-19-7)
LD50 (Ingestion): 1891 mg/kg (mouse-anhydrous)
LDLo (Ingestion): 221 mg/kg (man-unreported route)
TDLo (Ingestion): 45 mg/kg/7D (human-anhydrous)

Manganese sulphate monohydrate (10034-96-5)
TDLo (Ingestion): 513 mg/kg (mouse)

12. ECOLOGICAL INFORMATION

Ecotoxicity: Limited ecotoxicity data was available for this product at the time this report was prepared. Ensure appropriate measures are taken to prevent this product from entering the environment.

Persistence and Degradability: No data available

Mobility: No data available

13. DISPOSAL CONSIDERATIONS

Disposal Methods, including Disposal of Containers: Ensure product is covered with moist soil to prevent dust generation and dispose of to approved Council landfill. Contact the manufacturer if additional information is required.

Special Precautions for Landfill or Incineration: No data available

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT:

Not classified as Dangerous Goods under ADG 7 when being transported in IBC's or other receptacles < 500L (kg) (Special Provision AU01)

MARINE AND AIR:

Classified as Dangerous Goods for transport by sea and air according to the criteria of the UN Model Regulations of Transport of Dangerous Goods 17th Edition.

UN Number: 3077

UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

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Subsidiary Risk:
Packing Group: III
Special Precautions for User: None specified.
HAZCHEM Code: 2Z

15. REGULATORY INFORMATION

SUSMP: Classified as a Schedule 6 (S6) Poison using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
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: First edition
Revision Due: 2017
Preparation Information: Prepared by Campbells Fertilisers Australasia
Data Sources: Supplier MSDS

Glossary:

CAS Chemical Abstract Services number, used to uniquely identify chemical compounds
NOHSC National Occupational Health and Safety Commission
PPE Personal protective equipment
SWA Safe Work Australia
SUSMP Standard for the Uniform Scheduling of Medicines and Poisons
TWA Time Weighted Average

This MSDS 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 MSDS