

MULTITRACE TITAN

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	Multitrace Titan
Other Means of Identification	-
Other Names	-
Product Use	Trace elements fertiliser
Company Name	AgroBest Australia Pty Ltd
Address	9 Palings Court Nerang QLD 4211
Telephone Number	07 5596 0622
Emergency Telephone	0419 758 458

2. HAZARDS IDENTIFICATION

Classification of the Substance or Mixture



H302 - Harmful if swallowed

H318 - Causes serious eye damage

H315 - Causes skin irritation

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

Exclamation Mark

Environment

Acute Toxicity - Oral - Warning - Hazard Category 4

Serious Eye Damage/Irritation - Danger - Hazard Category 1

Skin Corrosion/Irritation - Warning - Hazard Category 2

**GHS Label Elements Including
Precautionary Statements**

Prevention:

- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Wear eye protection/face protection.
- Wear protective gloves.

Response:

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Rinse mouth.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation occurs: Get medical attention.

Take off contaminated clothing and wash before reuse.

Storage:

Store in a well-ventilated place. Keep container tightly closed.

Disposal:

Dispose of contents/container according to applicable local and state government regulations.

Other hazards which do not result in classification

No information fou

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Characterisation	Mixture	
Ingredient (Common Name)	CAS No	Concentration
Sulfuric acid, iron (2+) salt (1:1), heptahydrate (ferrous sulfate, heptahydrate)	7782-63-0	30-60%
Zinc sulphate heptahydrate	7446-20-0	30-60%
Water	7732-18-5	30-60%
Urea	57-13-6	10-30%
Sulfuric acid, copper (2+) salt (1:1) (copper sulfate)	7758-98-7	<10%
This is a commercial product whose exact concentration of ingredients may vary slightly.		

4. FIRST AID MEASURES

Inhalation	If inhaled, remove to fresh air.
Ingestion	Rinse mouth with water. Never give anything by mouth to an unconscious person. Seek medical attention if you feel unwell.
Skin	In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.
Eyes	In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention if symptoms occur.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	For major fires call the Fire Brigade. Ensure that an escape path is available from any fire. Use fire extinguishing media suitable to surrounding fire conditions.
Hazardous Combustion Products	No information available.
Special Protective Equipment and Precautions for Fire Fighters	Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing.
Unusual Fire or Explosion Hazards	Product does not present an explosion hazard.

Hazchem Code •3Z

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures	Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation.
Environmental Precautions	In the event of a major spill, prevent spillage from entering drains or water courses.
Methods and Materials for Containment and Cleaning Up	Slippery when spilt. Clean up all spills immediately. Stop leak if safe to do so and absorb spill onto sand, earth, vermiculite or some other inert absorbent material. Collect the spilled material and place into a suitable container for disposal. Flush away spill area residues with copious amounts of water.

7. HANDLING AND STORAGE

Precautions for Safe Handling	Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Ensure adequate ventilation. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.
Conditions for Safe Storage	Store in a cool, dry and well-ventilated area. Keep container tightly closed when not in use. Keep away from incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters - Exposure Standards (Safe Work Australia) Engineering Controls	Ferrous sulfate, heptahydrate: TWA: - ppm / 1 mg/m ³ STEL: - ppm / - mg/m ³ Provide adequate ventilation to maintain air concentrations below exposure standards. While good natural ventilation may be adequate in most cases, local exhaust ventilation may be required.
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Personal Protective Equipment (PPE)

Respiratory Protection	No respiratory protection needed. See Australian Standards AS/NZS 1715 and 1716 for more information.
Eye/Face Protection	Safety glasses with top and side shields. See Australian Standards AS/NZS 1336 and 1337 for more information.
Skin Protection	Protective PVC gloves, protective overall, waterproof apron and safety boots. See Australian Standards AS/NZS 2161, 2210.1 and 2210.2 for more information.
Thermal Hazards	Not applicable.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Dark green liquid
Odour	Mild odour
Odour Threshold	No information available
pH	1-2
Melting Point / Freezing Point	Not applicable
Initial Boiling Point / Range	>100°C
Flash Point	Not applicable
Evaporation Rate	<1
Flammability	Non-flammable
Lower Flammability or Explosive Limit	Not applicable
Upper Flammability or Explosive Limit	Not applicable
Vapour Pressure	No information available
Vapour Density	No information available
Relative Density (Specific Gravity)	1.38
Solubility in Water	Soluble
Partition coefficient: n-octanol/water	No information available
Ignition Temperature	No information available
Decomposition Temperature	No information available
VOC	No information available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable at ambient temperature and under normal conditions of use
Possibility of Hazardous Reactions	No hazardous reactions will occur.
Conditions to Avoid	No information available.
Incompatible Materials	No information available.
Hazardous Decomposition Products	No information available.

11. TOXICOLOGICAL INFORMATION

Toxicity	<p>Ferrous sulfate, heptahydrate: Oral LD₅₀ (mouse) = 1520 mg/kg Interperitoneal LD₅₀ (mouse) = 245 mg/kg IntravenousLD₅₀ (mouse) = 51 mg/kg Target Organs: Gastrointestinal system and liver</p> <p>Zinc sulphate heptahydrate: Oral LD₅₀ (rat) > 574 mg/kg Dermal LD₅₀ (rat) > 2000 mg/kg Ingestion can cause irritation or corrosion of the alimentary tract. Contact with eyes or skin causes irritation. Target Organs: Skin, eyes, respiratory system and lungs</p> <p>Copper sulfate: Oral LD₅₀ (rat) = 482 mg/kg Interperitoneal LD₅₀ (rat) = 20 mg/kg</p>
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	IntravenousLD ₅₀ (rat) = 48.9 mg/kg Symptoms of systemic copper poisoning may include: capillary damage, headache, cold sweat, weak pulse kidney and liver damage, CNS depression, jaundice, convulsions, paralysis, and coma.
Acute Health Effects	
Inhalation	Not expected to be a hazard.
Ingestion	Harmful if swallowed.
Skin Corrosion/Irritation	Causes skin irritation.
Serious Eye Damage/Irritation	Causes serious eye damage.
Respiratory or Skin Sensitisation	Not expected to be a hazard.
Germ Cell Mutagenicity	Not expected to be a hazard.
Carcinogenicity	This product does NOT contain any IARC listed chemicals.
Reproductive Toxicity	Not expected to be a hazard.
Specific Target Organ Toxicity (STOT) - Single Exposure	Not expected to be a hazard.
Specific Target Organ Toxicity (STOT) - Repeated Exposure	Not expected to be a hazard.
Aspiration Hazard	Not expected to be a hazard.
Chronic Health Effects	Not expected to be a hazard.
Existing Conditions Aggravated by Exposure	Not expected to be a hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Very toxic to aquatic life with long lasting effects
Persistence and Degradability	No information available.
Bioaccumulative Potential	No information available.
Mobility in Soil	No information available.

13. DISPOSAL CONSIDERATIONS

Disposal methods and containers	Dispose according to applicable local and state government regulations.
Special precautions for landfill or incineration	Please consult your state Land Waste Management Authority for more information.

14. TRANSPORT INFORMATION

Classified as a dangerous good according to the Australian Code for the Transport of Dangerous goods by road or rail (ADG 7).

UN Number	3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.



SAFETY DATA SHEET

Dangerous Goods Class	9
Subsidiary Risk	Not applicable
Hazchem Code	•3Z
Packing Group	III
Special Provisions	179, 274, 331, 335, AU01
Limited Quantities	5L
Packagings & IBCs - Packing Instruction	P001, IBC03, LP01
Packagings & IBCs - Special Packing Provisions	PP1
Portable Tanks & Bulk Containers – Instructions	T4
Portable Tanks & Bulk Containers – Special Provisions	TP1, TP29

15. REGULATORY INFORMATION

Ferrous sulfate, heptahydrate, zinc sulfate, water, urea and copper sulfate are listed in the Australian Inventory of Chemical Substances (AICS).

Poisons Schedule: 6

16. OTHER INFORMATION

Last Revision of MSDS	Rev 1.1 6/27/2022
Abbreviations Used	GHS: Globally Harmonised System of Classification and Labeling of Chemicals IARC: International Agency for Research on Cancer STEL: Short term exposure limit TWA: Time weighted average

Emergency Contacts

AgroBest Australia Pty Ltd	07 5596 0622
AgroBest Australia Pty Ltd – Emergency Number	0419 758 458
Police and Fire Brigade	000
Poisons Information Centre	13 11 26