agrichem®
ABN: 62 722 972 645

Head Office
2 Hovey Rd, Yatala
QLD 4207, Australia.

Postal Address:
PO Box 6127, Yatala
QLD 4207, Australia

Phone: +61 7 3451 0000
Fax: +61 7 3451 0093
Email: customerservice@agrichem.com.au

Safety Data Sheet

TraceXtra™ SDS revision 03 13th September 2021

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	TraceXtra™
Other Names	None
Uses:	Plant food, activator and catalyst for professional applicators
Chemical family	Plant / crop nutrition
Chemical formula	Inorganic plant nutrition
Chemical name	None allocated
Product description	Liquid fertiliser, for the correction and prevention of plant nutrient deficiencies
Contact details of the supplier of this Safety Data Sheet	
Company Name	Agrichem
Company address	2 Hovey Rd Yatala QLD 4207 Australia
Phone number	+ 61 7 3451 0000
Emergency contact	Poison Information Centre Australia – **13 11 26**

2. HAZARD IDENTIFICATION

Poisons Schedule (Australian)	Not regulated in the concentrations present
Globally Harmonised System (GHS) Hazard classification	This product is classified as hazardous under GHS / WHS
Hazard Category	Corrosive to metals: Category 1 Skin corrosion/irritation: Category 2 Eye irritant: Category 2B Toxic to reproduction: Category 1B
Pictograms	
Signal word	Danger
Hazard Statements	H315 Causes skin irritation H319 Causes serious eye damage / irritation H290 May be corrosive to metals H360 May damage fertility or the unborn child
Prevention	P234 Keep only in original container P264 Wash hands, arms, and face thoroughly after handling P201 Obtain special instructions before use P202 Do not handle until all safety precautions have been read and understood P281 Use personal protective equipment as required
Response	P302+352 IF ON SKIN: Wash with plenty of soap and water P332+313 If skin irritation occurs: Get medical advice / attention P362 Take off contaminated clothing and wash before reuse P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing P337+313 If eye irritation persists: Get medical advice / attention P308+313 If exposed or concerned: Get medical advice/attention P390 Absorb spillage to prevent materials damage

Storage	P405 Store locked up P406 Store in corrosive resistant container with resistant inner liner
Disposal	P501 Dispose of contents / container in accordance with local/regional/national regulations.

National Transport Commission (Australian)
Australian Code for the transport of Dangerous Goods by Road and Rail (ADG Code)

Is Not a Dangerous Goods according to the criteria of the ADG Code for road or rail transport ref ADG Code, ref to chapter 14 of this SDS.

3. INFORMATION ON INGREDIENTS

Ingredient	CAS Registry number	Proportion %w/w
Water	732-18-5	≥30 - <60
Citric acid	77-92-9	<5
Ferrous sulphate	7720-78-7	>5 - <17
Zinc compound	7733-02-0	<5
Manganese compound	7785-87-7	<5
Urea	57-13-6	<15
Boric compound	10043-35-3	<5
Copper compound	7785-98-7	<5
Molybdate compound	7631-95-0	<5

No other ingredients present which to the current knowledge of Agrichem & in the concentrations present are classified as hazardous and thereby require reporting in this chapter.
Any value shown as a range is to preserve confidentiality or is due to batch variation.

4. FIRST AID MEASURES

Description of necessary measures according to routs of exposure

Swallowed	Rinse mouth with water. Sip a glass of water if victim is conscious. Do not Induce vomiting unless directed to do so by medical authority. Never give anything by the mouth to an unconscious patient. Seek medical advice.
Eye	Immediately wash in and around the eye area with water for several minutes. Eyelids to be held apart. Check for contact lenses, remove if easy to do so. Continue rinsing. Seek medical attention.
Inhalation	Avoid breathing mist, spray or vapour. If inhaled, remove to fresh air. Employ artificial respiration if indicated. Seek medical attention.
Skin	Take off contaminated clothing. Rinse skin immediately with plenty of water for several minutes. Seek medical advice if irritation persists.
Advice to Doctor	Treat symptomatically based on judgement of doctor and individual reactions of patient.
Medical Conditions Aggravated by Exposure	No Data Available

Have the product container or label with you when calling the Poison Information Centre or a doctor or going for treatment.

5. FIRE FIGHTING MEASURES

General measures	Clear area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. Use clean non-sparking tools and equipment.
Flammability conditions	This is not a flammable material
Extinguishing Media	Use any means suitable for extinguishing surrounding fire.
Fire and Explosion Hazard	No data available
Hazardous Products of Combustion	If heated beyond melting points to decomposition, toxic gases may evolve
Special Fire Fighting Instructions	Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.

Personal Protective Equipment	Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves).
Flash point	No data available
Lower Explosion Limit	No data available
Upper Explosion Limit	No data available
Auto ignition Temperature	No data available
Hazchem Code	No data available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedures	Avoid accidents, clean up immediately. Slippery when spilt. Increase ventilation. Avoid generating dust from dried product. Stop leak if safe to do so. Isolate the danger area.
Clean up Procedures	Land spill: Dike spill with absorbent and inert materials. Vacuum, shovel, pump or sweep up the product and place in containers for disposal in accordance with applicable local regulations. Avoid contamination of water bodies during clean up and disposal. See containment section below. Spillage into water. Where possible, remove any intact containers from the water. Advice to local water authority that none of the affected water should be used for irrigation or for the abstraction of potable water until natural dilution returns water to normal environmental background levels.
Containment	Stop Leak if safe to do so. Isolate the danger area. Dike and absorb spill using inert materials
Environmental Precautionary Measures	DO NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority and local Waste Management. The product is soluble in water (see section 12)
Evacuation Criteria	Evacuate all unnecessary personnel from immediate area
Personnel Precautionary Measures	Personnel involved in the clean-up should wear protective clothing as listed in section 8.

7. HANDLING AND STORAGE

Handling	Prevent against physical damage. Wash hands after handling this material. Good housekeeping, splash and dust (when product dries) prevention procedures should be followed to minimize exposure and accumulation. Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Avoid contact with eyes, skin and clothing. Do not inhale product mist, spray or fumes. Your supplier can advise you on safe handling, please contact the supplier.
Storage	Store in a cool, dry, well-ventilated area. Keep containers tightly closed if not in use. Inspect regularly for hazards such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in section 10. Do not store with food stuffs. Use good housekeeping practices to prevent accumulation of product and follow sound cleaning techniques that will prevent contamination. Dry indoor storage is recommended. Provide appropriate ventilation and store containers such as to prevent any accidental damage.
Container / tankage	Store in original packaging as approved by manufacturer.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No specific exposure standards has been established for this product by Safe Work Australia
Exposure Limits	Where available for ingredients is listed below
Biological limits	No Data Available. However all atmospheric contamination should be keep to as low a level as is workable and a default threshold limit value of 10 mg/m3 as a time weighted average for liquefied mists.
Engineering Measures	A system of local and or general exhaust is recommended to keep employee exposure as low as possible. Local exhaust extraction / ventilation is preferred as it controls emissions at the source preventing dispersion of the general work area. Adequate ventilation should be provided so that exposure limits are not exceeded.
Personal Protection Equipment PPE	
	RESPIRATOR: Respirators should be used for conditions of use where exposure to spray or mist is apparent and engineering controls are not feasible.
	EYES: Use chemical safety goggles. Maintain eye wash fountain and quick drench facilities in work area (AS1336/1337). An emergency eyewash or water supply should be readily accessible to the work area.
	HANDS: Gloves, chemical resistant (AS2161).
	CLOTHING: Lab coat, apron or coveralls and safety footwear (AS3765/2210).
Work Hygienic practices	Thoroughly wash hands, forearms and face after using product, prior to eating, smoking using toilet or at end of work period. Contaminated clothing to be laundered prior to re-use

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid
Appearance	Solution
Odour	Slight, characteristic
Colour	Green to brown
pH	1.5 – 2.5
Vapour pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling point	>100 degrees Celsius
Melting point	No Data Available
Freezing point	No Data Available
Solubility in water	Soluble in water (aqueous solution)
Specific gravity	1.31 – 1.34
Flash point	No Data Available
Auto Ignition Tem	No Data Available
Decomposition temp	No Data Available
Molecular weight	No Data Available
Particle size	No Data Available
Particle size distribution	Solution product, no significant particles present
Viscosity	< 100 centipoise
Note: Physical data are typical values but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.	

10. STABILITY AND REACTIVITY

General Information	Reactions with strong reducing agents such as metal hydrides or alkaline metals, may release ammonia
Chemical Stability	Stable under ordinary conditions.
Conditions to Avoid	Excessive heat, do not store near heat or flames or temperatures below 5 ^{0}C.
Materials to Avoid	1. Strong bases 2. Strong oxidising agents - may decompose

	3. Metals corrosive to most
Hazardous Products of Decomposition	May evolve metal oxides if heated to decomposition, see chapter 3
Hazardous Polymerisation	No Data Available

11. TOXICOLOGICAL INFORMATION	
General Information	No deleterious effects expected if product is handled in accordance with this Safety Data Sheet and product label. Health effects may arise if product is mishandled
Eye Irritant	Eye irritant (pH 1.5 – 2.5). Contact may cause serious eye irritation, lacrimation, pain and redness
Ingestion	Oral LD_{50} >2000 mg/kg by acute toxicity estimation
Inhalation	No Data Available
Skin Irritant	Irritant to skin (pH 1.5 – 2.5) Contact may result in irritation, redness in sensitive individuals
Reproduction	Contains boric acid which is suspected of being a reproductive toxin in humans
Carcinogen Category	No Data Available
Mutagenicity	No Data Available
Information on toxicological effects by ingredients where available	
Water	Oral LD_{50} >90000 mg/kg in the Rat
Urea	Oral LD_{50} 8471 mg/kg in the Rat
Manganese sulphate	Oral LD_{50} 2150 mg/kg in the Rat
Zinc sulphate	Oral LD_{50} 1710 mg/kg in the Rat
Ferrous sulphate	Oral LD_{50} 319 mg/kg in the Rat
Boric acid	Oral LD_{50} 2660 mg/kg in the Rat

12. ECOLOGICAL INFORMATION	
General Ecotoxicity	Inorganic chemistry, limited Ecotoxicity data available
Algal toxicity	No Data Available
Invertebrate toxicity	No Data Available
Vertebrate toxicity	No Data Available
Persistence/ Degradability	In accordance with column 2 of Reach annex VII, the readily biodegradability test does not need to be conducted as the substance is inorganic
Mobility	Soluble in water
Environmental Fate	Do NOT let product reach waterways, drains and sewers
Bioaccumulation	Low, as elements in product are essential to plant life and removed with crop
Environmental impact	No Data Available
Ecological hazard by ingredient, where available	
Urea	Toxicity threshold: Scenedesmus quadricauda (green algae) >10,000 mg/l, toxic effect: multiplication inhibition of cell.
Zinc sulphate	LC50 40 mg/kg in the Carassius auratis (Goldfish) 24 hour exposure @ 15 ^{0}C
Boric acid	EC_{50} 40 mg/l in the Green algae 72 hour exposure LC_{50} 760mg/l in the Daphnia magna 48 hour exposure

13. DISPOSAL CONSIDERATIONS	
General Information	Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.
Special Precautions for Landfill	Small quantities of this product can usually be disposed of at Liquid Waste Disposal sites. No special disposal treatment is required, but local authorities should be consulted about any specific local requirements. Larger volumes of this product are not recommended to be sent to Liquid Waste Disposal sites. Such product should, if possible, be used for an appropriate application.

14. TRANSPORTATION INFORMATION

Land Transport, Australian Dangerous Goods Code (ADG Code) for transport by road and rail.	
DG classification	**Not a** Dangerous goods as per ADG Code
Proper Shipping Name	Compounded product, no data available
Class	Compounded product, no data available
EPG	Compounded product, no data available
UN Number	Compounded product, no data available
Packaging group	Compounded product, no data available

15. REGULATORY INFORMATION

General information	Not a Dangerous goods under ADG Code
Poisons Schedule	Not regulated in the concentrations present
Hazardous Chemical Information system (HCIS)	Not listed in HCIS

16. OTHER INFORMATION

The information contained in this SDS is by way of general comment only. Because conditions of use, suitability of product and application conditions are beyond the control of Agrichem, this SDS does not offer any advice in respect to any product. The authors and Agrichem hereby disclaim any liability to any person, property, or thing in respect of any consequence of anything done or omitted to be done by any person in reliance, whether wholly or in part, upon whole or part of the contents of this SDS.

KEY

< Less than
> Greater than
a.i. Active ingredient
ADG Code Australian dangerous goods code
AICS Australian Inventory of Chemical Substances
ATE Acute toxicity extimation
atm Atmosphere
CAS Chemical Abstract Service (registry number)
Cm² Square Centimetres
CO2 Carbon Dioxide
deg C (°C) Degrees Celsius
EPA Environmental Protection Agency based in each state of Australia
g Grams
g/cm3 Grams per Cubic Centimetre
g/l Grams per Litre
GRAS Generally recognised as safe
HSIS Hazardous substances information system
HSNO Hazardous substances and New Organism
HDPE High density polypropylene
IDLH Immediately Dangerous to Life and Health
Immiscible Liquid are insoluble in each other
inHg inch of Mercury
InH_20 Inch of Water
K Kelvin
kg Kilogram
kg/m³ Kilogram per Cubic Metre
LC_{50} LC stands for lethal concentration, LC_{50} is the concentration of a product in air that will cause the death of 50% of a population of test animals. Product is normally inhaled for between 1 and more typically 4 hours
LD_{50} LD stands for lethal dose. LD_{50} is the amount of product given in a single dose, causing death in 50% of a population of test animals.
LDLo The lowest amount of a solid or liquid material reported to have caused the death of animals or humans
m³ Cubic Metre
mbar Millibar

mg Milligram
mg/24H Milligrams per 24 hours
mg/kg Milligrams per Kilogram
mg/m^3 Milligrams per Cubic Metre
Misc or **Miscible** Liquids from one homogeneous liquid phase regardless of the amount of either component present
mm Millimetre
mmH_2O Millimetres of Water
mPa.s Millipascals per Second
MSHA Mine safety and health administration
N/A Not Applicable
NIOSH National Institute for Occupational Safety and Health
NOHSC National Occupational Health and Safety Commission
OECD Office for Economic Co-operation and Development
PEL Permissible Exposure Limit
Pa Pascal
ppb Parts per Billion
PPE personal protective equipment
ppm Parts per Million
ppm/2h Parts per million per 2 hours
ppm/6h Parts per million per 6 hours
psi Pounds per square inch
R Rankine
RCP Reciprocal Calculation Procedure
SCBA Self Contained Breathing Apparatus
SWA Safe Work Australia
STEL Short Term Exposure Limit
SUSMP Standard for the uniform scheduling of medicines and poisons
TVL Threshold Limit Value
TWA Time Weighted Average
UN United Nations
wt Weight

End of SDS