


Safety Data Sheet

 Pirotechnica™ SDS revision 03 19th January 2024

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	Pirotechnica™
Other Names	None
Uses:	Plant food, activator and catalyst for professional applicators
Chemical family	Plant/crop nutrition
Chemical formula	Compounded product, no data available
Chemical name	Compounded product, no data available
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 listed in SUMP
Globally Harmonised System (GHS) Hazard classification	Hazardous substance according to the criteria of the GHS Classification and labelling of Chemicals (GHS)
Hazard Category	Eye irritation – Category 2A Skin irritation – Category 2 Acute Toxicity (Oral) – Category 4
Pictograms	
Signal word	Warning
Hazard Statements	H319 Causes serious eye irritation. H315 Causes skin irritation. H302 Harmful if swallowed.
Prevention	P264 Wash hands thoroughly after handling. P280 Wear eye protection. P270 Do not eat, drink or smoke when using this product.
Response	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice. P302+P352 IF ON SKIN: Wash with plenty of water. P321 Specific treatment (see section 4 of this SDS). P332+P313 If skin irritation occurs: Get medical advice. P362+P364 Take off contaminated clothing and wash it before reuse. P301+P312 IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.
Storage	Store in accordance with local regulations.

Disposal	P501 Dispose of contents and container in accordance with local, state and federal regulations.
National Transport Commission (Australian) Australian Code for the transport of Dangerous Goods by Road and Rail (ADG Code)	
Is NOT Dangerous Goods according to the criteria of the ADG Code for road or rail transport ref ADG Code, ref to section 14 of this SDS.	

3. INFORMATION ON INGREDIENTS

Ingredient	CAS Registry number	Proportion %w/w
Iron salts	Prop	30 -60
No other ingredients present which to the current knowledge of Agrichem & in the concentrations present are classified as hazardous to health and thereby require reporting in this section.		

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personal, seek medical advice immediately. Have this SDS with you at medical examination.
Eye	Immediately wash in and around the eye area with plenty of water for several minutes. Eyelids to be held apart. Check for contact lenses, remove if easy to do so. Seek medical attention.
Inhalation	Avoid breathing mist, spray or vapour. If inhaled, remove to fresh air. Should breathing become irregular or stop, apply artificial respiration. Consult a medical doctor immediately.
Skin	Take off contaminated clothing. Rinse skin and hair immediately with plenty of soap and water. Seek medical advice if irritation persists. Wash clothing prior to reuse.
Advice to Doctor	Treat symptomatically based on judgement of doctor and individual reactions of patient. If patient has inhaled decomposition products (fire) symptoms may be delayed. Exposed person to remain under medical observation for 48 hours.
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.
Flammability conditions	Non-flammable, aqueous solution.
Extinguishing Media	Use any means suitable for extinguishing surrounding fire.
Fire and Explosion Hazard	Containers if heated, resultant increase in pressure may cause container to burst. Do not inhale fumes and or gases of combustion.
Hazardous Products of Combustion	No data available
Special Fire Fighting Instructions	Do NOT allow firefighting water to reach waterways, drains or sewers. Store firefighting water for treatment.
Personal Protective Equipment	Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting 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	<p>Land spill: Dike spill with using absorbent or impervious materials such as earth, sand or clay. 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.</p> <p>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.</p>
Containment	Stop leak if safe to do so. Isolate the danger area. Dike and absorb spill using inert absorbent materials such as earth, sand, clay, zeolite, or diatomaceous earth.
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.
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.
Container	Store in original packaging as approved by manufacturer.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No specific exposure standards have been established for this product by Safe Work Australia.
Exposure Limits by ingredient	No data available. However, all atmospheric contamination should be kept to as low a level as is workable. TWA 1 mg/m ³ as per USA NIOSH recommended exposure limits.
Biological limits	No information on biological limit values available for this product.

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 (butyl rubber or PVC recommended) (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 black
pH	1.0 – 2.0
Vapour pressure	No data available
Relative vapour density	No data available
Boiling point	>100°C
Melting point	No data available
Freezing point	No data available
Solubility in water	Soluble in water (aqueous solution)
Specific gravity	1.28 – 1.32
Flash point	Not applicable
Auto ignition temp	No data available
Decomposition temp	No data available
Molecular weight	No data available
Particle size	Solution product, no significant particles present
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	This product is stable under normal handling and storage conditions.
Chemical Stability	Stable under ordinary conditions.
Conditions to Avoid	Excessive heat, do not store near heat or flames or temperatures below 5°C.
Materials to Avoid	<ol style="list-style-type: none"> 1. Strong bases – can release ammonia 2. Strong oxidising agents – may decompose

Hazardous Products of Decomposition	No data available
Hazardous Polymerisation	No data available

11. TOXICOLOGICAL INFORMATION

General Information	Exposure by all routes should be minimised under good product stewardship.
Eye Irritant	Contact with eyes will cause serious irritation.
Ingestion	May cause diarrhoea, nausea, vomiting, cramps, weakness and tiredness
Inhalation	No data available

Skin Irritant	Causes skin irritation.
Reproduction	No data available
Carcinogen Category	No data available
Information on toxicological effects by ingredients where available	

12. ECOLOGICAL INFORMATION

General Ecotoxicity	Not expected to be harmful to aquatic organisms. Adopt good working practices and procedures to restrict environmental release.
Persistence/ Degradability	Readily consumed in plants to support growth.
Mobility	Highly soluble in water
Environmental Fate	Do NOT let product reach waterways, drains and sewers.
Bioaccumulation	Low, as all elements in product are essential to plant life
Environmental impact	No data available
Information on ecological effects by ingredients where available	

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.

1. TRANSPORTATION INFORMATION

Land Transport, Australian Dangerous Goods Code (ADG Code).

DG classification Not listed in ADG Code

Regulation: ADR / RID

UN number Not regulated
UN proper shipping name Not applicable
Transport hazard class (es) Not applicable
Packaging group Not applicable
Environmental hazard No applicable
Additional information Not applicable

Comments NON-DANGEROUS GOODS: Not regulated for LAND transport

Regulation: IMDG

UN number Not regulated
UN proper shipping name Not applicable
Transport hazard class (es) Not applicable
Packaging group Not applicable
Environmental hazard Not applicable
Marine pollutant No

Comments NON-DANGEROUS GOODS: Not regulated for SEA transport

Regulation: IATA

UN number Not regulated

UN proper shipping name	Not applicable
Transport hazard class (es)	Not applicable
Packaging group	Not applicable
Environmental hazard	Not applicable
Comments	NON-DANGEROUS GOODS: Not regulated for AIR transport

15. REGULATORY INFORMATION

General information	Not a Dangerous goods under ADG Code.
Poisons Schedule	Not listed in SUMP
Hazardous Chemical Information system (HCIS)	Individual ingredient/s are 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 Manufacturing Industries Pty Ltd 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 estimation

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

InH₂O Inch of Water

K Kelvin

kg Kilogram

kg/m³ Kilogram per Cubic Metre

LC₅₀ LC stands for lethal concentration, LC₅₀ 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

LD₅₀ LD stands for lethal dose. LD₅₀ 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/m³ Milligrams per Cubic Metre

Misc or **Miscible** Liquids from one homogeneous liquid phase regardless of the amount of either component present

mm Millimetre

mmH₂O 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

End of SDS

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