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Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	Supa Copper™
Other Names	**None**
Uses:	Plant food, activator and catalyst, for professional applicators
Chemical family	Mineral based plant nutrition
Chemical formula	(CuK_2 EDTA)
Chemical name	Dipotassium salts of copper ethylenediaminetetraacetic acid
Product description	Liquid fertiliser, for the correction/prevention of 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 SUSMP
Globally Harmonised System (GHS) Hazard classification	Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals.
Hazard Category	Acute toxicity Category 4 Eye Irritation Category 2
Pictograms	 Exclamation mark
Signal word	Warning
Hazard Statements	H302+312+332 Harmful if swallowed, in contact with skin or if inhaled H320 Causes eye irritation
Prevention	P280 Wear protective gloves/protective clothing/eye protection/ face protection
Response	P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	P405 Store locked up
Disposal	P501 Dispose of contents / container in accordance with local/regional/ national international regulations

3. INFORMATION ON INGREDIENTS

Ingredient	Identifiers	Proportion %w/w
Water	CAS: 7732-18-5 EC: 231-791-2	Balance
Dipotassium salts of copper ethylenediaminetetraacetic acid (CuK_2 EDTA)	CAS: 67989-88-2 EC: 268-018-3	≥30 - <60

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, drink a glass of water/milk. Never give anything by mouth to an unconscious person. Do not induce vomiting. Get immediate medical attention
Eye	Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Remove contact lenses if present and easy to do so. Call a medical doctor or poison information centre for treatment advice.
Inhalation	Remove to fresh air. If not breathing call ambulance, give artificial respiration, use pocket mask with one way valve or other respiratory medical device. If breathing is difficult give oxygen. Call a doctor / physician or the Poison Information Centre for treatment advice.
Skin	Immediately remove any contaminated clothing. Wash skin, & hair with soap or mild detergent and plenty of water. Seek medical advice if irritation persists. Wash clothing before re-use.
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 fire 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-combustible, aqueous suspension.
Extinguishing Media	Use any means suitable for extinguishing surrounding fire.
Fire and Explosion Hazard	Non-combustible. Containers if heated, resultant increase in pressure may cause container to burst.
Hazardous Products of Combustion	May include the following, carbon monoxide & dioxide nitrogen oxides and metal oxide/oxides. Avoid breathing vapours and fumes from burning product
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. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust from dried product. Stop leak if safe to do so. Isolate the danger area. Use clean non-sparking tools and equipment.
Clean up Procedures	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. Spillage into water: Where possible, remove any intact containers from the water. Advise 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 the elements listed in section 3 to its normal environmental background level.
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, high concentrations may cause damage to plant roots and foliage via absorption (see section 12).
Evacuation Criteria	Evacuate all unnecessary personnel from immediate area
Personnel Precautionary Measures	Personnel involved in the clean-up should wear full 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 kept 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	Translucent
Odour	Slight, Characteristic
Colour	Blue
pH	7.5 – 10.5
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
Specific gravity	1.15 – 1.20
Flash point	No Data Available
Auto Ignition Temp	No Data Available
Decomposition temp	No Data Available
Molecular weight	387.83 pure
Particle size	No Data Available
Particle size distribution	No Data Available
Viscosity	No Data Available

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.
Materials to Avoid	1. Strong oxidizing agents – May decompose
Hazardous Products of Decomposition	Carbon mono and dioxide, metal oxides of copper
Hazardous Polymerisation	Will not occur

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 and or discussed blow.
Eye Irritant	Acute: May cause moderate but temporary irritation. Additional effects may include tearing and or blurred vision.
Ingestion	Acute LD_{50} is 2839 mg/kg by estimation. May be harmful if swallowed
Inhalation	Acute LC_{50} >5mg/l by estimation. Inhalation of a large concentration of mist may cause respiratory tract irritation and discomfort.
Skin Irritant	Acute LD_{50} is 3788 mg/kg by estimation. Contact may cause moderate irritation. Prolonged or repeated exposures may lead to dermatitis, reddening of skin, skin rash or other skin reaction.
Reproduction	No Data Available
Carcinogen Category	No Data Available

12. ECOLOGICAL INFORMATION	
General Ecotoxicity	No Ecological information is available for this product
Algal toxicity	Algal toxicity: No Data Available
Invertebrate toxicity	Invertebrate toxicity: No Data Available
Persistence/ Degradability	No Data Available
Mobility	Fully water soluble.
Environmental Fate	Do NOT let product reach waterways, drains and sewers
Bioaccumulation	No data available
Environmental impact	No data 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.

14. TRANSPORTATION INFORMATION	
Land Transport, Australian Dangerous Goods Code (ADG Code) for transport by road and rail.	
DG classification	Not listed in ADG Code
Proper Shipping Name	Not listed in ADG Code
Class	Not listed in ADG Code
EPG	Not listed in ADG Code
UN Number	Not listed in ADG Code
Packaging group	Not listed in ADG Code

15. REGULATORY INFORMATION

General information	Not listed in ADG Code
Poisons Schedule	Not listed in SUSMP

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)
Cm^2 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
l**nH_20** Inch of Water
K Kelvin
kg Kilogram
kg/m^3 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
m^3 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