

Safety Data Sheet

CuZin LIQUI

SDS No: SDS548/000

Effective Date: 01/04/2025

Revision no: 000

Product Code: 548

SECTION 1

COMPANY AND CHEMICAL PRODUCT IDENTIFICATION

Product Name: CuZin Liqui

Chemical Identifier: Copper-Salts

Product Use: Fertiliser

Restrictions on use: Agriculture

Supplier:

Nutrigo SA (Pty) Ltd. (Co. Reg. No. 2003/008663/07)

Cedar Lake Industrial Estate,

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Emergency Contact Numbers

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Poison Information Centre: +27 86 155 5777

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Hazcall24: +27 86 044 4411

SECTION 2

HAZARDS IDENTIFICATION

Classification as defined by Regulation (EC) 1272/2008 [CLP] EU & SANS 10234:2008

Hazard Classes	Hazard Category	Hazard Statements
Health		
Acute toxicity (oral)	4	H302
Acute toxicity (dermal)	-	-
Inhalation	-	-
Skin irritation	2	H315
Eye irritation	2	H319
Reproductive	-	-
STOT (SE/RE)	-	-
Environmental		
Aquatic (Acute)	1	H400
Aquatic (Chronic)	1	H410

Label elements: labelling as defined by Regulation (EC) 1272/2008 [CLP] EU & SANS 10234:2008

Hazard pictograms



Signal word – Warming

Hazard statements

H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Precautionary statements

P102	Keep out of reach of children.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/face shield/eye protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P361+P354	IF ON SKIN: Take off Immediately all contaminated clothing. Immediately rinse with water for several minutes.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P501	Dispose of the contents/containers in accordance with the current legislation on waste treatment.

Special labelling of certain mixtures: Hazardous Substance, Liquid

Other hazards: None known

Toxicity: Classification according to GHS: Category 3

SECTION 3
COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Declared Active Ingredients:

Chemical name	CAS No.	EC No.	Conc. %w/w	Classification Regulation (EC) 1272/2008
Copper-Salts	N/A	N/A	10 - 30	H302, H315, H319, H400 & H410

SECTION 4
FIRST AID MEASURES

INHALATION: Remove victim to fresh air and keep comfortable for breathing. The product is harmful if inhaled. Get medical help if having trouble in breathing.

SKIN: Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. Obtain medical attention if irritation persists.

EYES: Flush eyes with clean water for at least 15 – 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. If irritation persists, seek medical attention.

INGESTION: Rinse mouth thoroughly with water and give 2 to 3 glasses of water to drink if the person is alert. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

IMPORTANT ACUTE EFFECTS: Harmful if swallowed
Causes skin irritation
Causes serious eye irritation
Very toxic to aquatic life

IMPORTANT DELAYED EFFECTS: Very toxic to aquatic life with long lasting effects

NOTE TO PHYSICIAN: This product contains Copper Sulphate Pentahydrate and Zinc Sulphate Monohydrate.

Treat symptomatically and supportively

SECTION 5 **FIRE FIGHTING MEASURES**

Suitable Extinguishing Media: Water, foam, alcohol, resistant, dry extinguishing power

Unsuitable Extinguishing Media: High volume water jet. Use a water jet only to cool heated containers.

Specific hazards: Non-combustible

Special Fire Fighting Procedures: Remove spectators from surrounding area. Isolate the fire area and evacuate all personnel downwind of the fire. Keep upwind. Remove container from fire area if possible and without risk. Do not use high volume water jet, due to contamination risk. Water can be used to cool unaffected containers but must be contained for later disposal. Avoid pollution of waterways by run-off from the site

Personal protective equipment: Wear NIOSH/MSHA approved self-contained breathing apparatus and full protective gear.

SECTION 6 **ACCIDENTAL RELEASE MEASURES**

Personal Precautions: Avoid contact with skin and eyes. Do not breathe in spray mist or fumes. Ventilate area of spill or leak, especially in contained areas

Protective equipment: Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.

Emergency procedures: Alert firefighting personnel, evacuate unprotected personnel and animals.

Environmental Precautions:	Prevent spilled product from entering sewers, waterways or ground water. This product is classified to be Toxic to aquatic organisms and causes long-term adverse effects in the aquatic environment. Any spillages or uncontrolled discharges into watercourses should be reported immediately to the police and the Department of Water/Environmental Affairs.
Methods & Materials for Containment:	Contain spilled product by diking area with sand or earth.
Methods & Materials for Clean-up:	Cover contained spill with an inert absorbent material such as sand, vermiculite, earth or other appropriate material. Vacuum, scoop, or sweep up material and place the material into a clean, dry, sealable container. Label containers with the contents and dispose of according to local regulations. Do not place spilled material back in original container. Do not re-use spill material. Collect washings and add to the drums already collected. Do not flush spilled material or washings into drains or waterways. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. See section 13 for disposal considerations.

SECTION 7

HANDLING AND STORAGE

HANDLING

Precautions for safe handling:	Ensure adequate ventilation during handling and use. Do not handle broken packages without protective equipment. Immediately clean up spills that occur during handling. Keep containers closed when not in use. In the case of contact with the product refer to First Aid Measures – Section 4.
General occupational hygiene:	Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. Worker should shower at the end of each workday. Launder all clothing before it is re-used.

STORAGE

Conditions for safe storage:	Keep out of reach of unauthorised persons, children and animals. Store in its original, labelled container, tightly closed, in an isolated, dry, cool and well- ventilated area. Avoid excess heat. Not to be stored next to foodstuffs, feed and water supplies. Avoid cross contamination with other pesticides and fertilisers.
Incompatible substances and mixtures:	Observe hints for combined storage,
Packaging material:	1 L, 5 L, 10 L, 20 L, 50 L, 1000 L Plastic containers

SECTION 8

EXPOSURE CONTROLS AND PERSONAL PROTECTION

Occupational exposure limits

Limit value type	Substance name	EC No.	CAS No.	Occupational exposure limit value		Threshold level	Protection goal, route of exposure	Source
				Long	Short term			
TWA	Copper Sulphate Pentahydrate	616-477-9	7758-99-8	N/A	N/A	1 mg/m ³	Human, Inhalatory	ECHA
	Zinc Sulphate Monohydrate	231-793-3	7446-19-7	N/A	N/A	35.6 mg/kg	Human, Inhalatory	ECHA

ENGINEERING CONTROLS:

It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OELs or other specified exposure limits. Local exhaust ventilation is preferred. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection:

For most well-ventilated conditions, no respiratory protection should be needed. If used in a poorly ventilated area (airborne concentrations exceed exposure limits), use a NIOSH approved air-purifying respirator.

Hand Protection:

The use of chemically protective gloves is recommended to prevent against skin contact.

Eye Protection:

The use of chemical safety goggles is recommended to prevent against eye contact. Contact lenses are not protective eye devices.

Skin and Body Protection:

Wear appropriate protective clothing; boots, hat and equipment to prevent repeated or prolonged skin contact with this substance.

Emergency eyewash:

Where there is any possibility that a handler's eyes may be exposed to this substance; an eye wash fountain should be provided or appropriate alternative within the immediate work area for emergency use.

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

Property	Value/description	Method
Physical state	Liquid	Visual
Colour	blue	Munsell
Odour	Odourless	Organoleptic
pH (1% aqueous dilution)	4.4	
Melting/Freezing point	Not applicable	
Boiling point	Not applicable	
Flash point	Not applicable	

Flammability	Not applicable	
Vapour pressure	Not applicable	
Relative Vapour Density	Not applicable	
Density	1.18 ± 0.05 g/ml	Pycnometer
Solubility	Not applicable	
n-Octanol/Water partition coefficient	Not applicable	
Auto-ignition temperature	Not applicable	
Decomposition temperature	Not applicable	
Viscosity	Not applicable	
Explosive properties	Not explosive	
Oxidising properties	Not oxidative	

SECTION 10 **STABILITY AND REACTIVITY**

Chemical Stability:	The product is stable for two years at ambient temperature and pressure, under normal storage and handling conditions. Avoid storage under extreme temperatures and conditions. Store below 50 °C, preferably below 30 °C, and not for prolonged periods in direct sunlight
Reactivity:	This material is not reactive under normal ambient conditions.
Possibility of Hazardous Reactions:	Violent reaction with strong oxidiser
Conditions to Avoid:	Keep away from heat. Decomposition takes place from temperature above: 240°C
Incompatible Materials:	There is no additional information.
Hazardous Decomposition Products:	Se section 5

SECTION 11 **TOXICOLOGICAL INFORMATION**

Toxicity	Effective dose/ concentration	Value	Species	Method
Acute Oral	LD ₅₀	1349 mg/kg	Rat	ECHA
Acute Dermal	LD ₅₀	521 mg/kg	Rabbit	ECHA
Acute Inhalation	LC ₅₀	>5 mg/m ³	Mammal (Not specified)	
Skin irritation	Causes skin irritation			
Eye damage	causes serious eye damage			
Skin sensitization	Shall not be classified as a respiratory or skin sensitizer			
Respiratory sensitization	Not classified as a respiratory sensitizer			
Mutagenicity/Genotoxicity:	Not classified as a mutagenic toxicant			
Carcinogenicity	Not classified as a carcinogen			
Reproductive toxicity	Not classified as a reproductive toxicant			
Specific target organ toxicity:	Not classified as a specific target organ toxicant			
Chronic effects (e.g developmental)	None known			

SECTION 12

ECOLOGICAL INFORMATION

Toxicity	Effect dose/ concentration	Value	Test duration	Species	Method/Source
Aquatic toxicity	LC ₅₀ EC ₅₀	112 µg/l 112 µg/l	96 h 48 hr	<i>Fish</i> <i>Aquatic invertebrate</i>	ECHA
Aquatic toxicity (Chronic)	Endpoint: NOEC	440 µg/l	72 days	Fish	
	Endpoint: NOEC	42 µg/l	21days	Aquatic invertebrates	
	Endpoint: NOEC	100 µg/l	10 days	Algae	

ENVIRONMENTAL EFFECTS

Persistence and degradability:

Methods of determining degradability do not apply for inorganic substances.

Bio-accumulative Potential:

Copper can bioaccumulate in aquatic organisms

Mobility in soil:

Immobile

Other adverse effects:

None known

SECTION 13

DISPOSAL CONSIDERATIONS

Waste:

Open dumping or burning of this product is prohibited. Waste resulting from the use of this product cannot be reused or re-processed. Never pour untreated waste or surplus product into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Comply with local legislation applying to waste disposal. The product may be taken to a registered waste disposal site or incineration plant.

Container:

Emptied containers retain product residues. Do not re-use the empty container for any other purpose. Triple rinse empty containers by inverting the empty container over the spray or mixing tank and allow draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter, rinse the container three times with a volume of water equal to a third of that of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner. Destroy the container by perforating and flattening and dispose of through an approved waste dump site, incineration plant or recycling company. Observe all labelled safeguards until container is destroyed.

SECTION 14
TRANSPORT INFORMATION

UN Number: 3077

Road Transport ADR/IRD:

Class: 9

Packaging group: III

UN Proper Shipping Name: Hazardous Substance, Liquid

Maritime Transport IMDG/IMO:

Class: 9

Packaging group: III

UN Proper Shipping Name: Hazardous Substance, Liquid

Marine Pollutant (Y/N): Yes

Air Transport IATA/ICAO:

Class: 9

Packaging group: III

UN Proper Shipping Name: Hazardous Substance, Liquid

Special/Environmental Precautions: None known

Transport in bulk: Not available

SECTION 15
REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture: OSHA 1993 Regulations for Hazardous Chemical Substances

Relevant information regarding restrictions: None

EU regulation: Regulation EC1272/2008

Other national regulations: None

Chemical Safety Assessment carried out: No chemical safety assessment was carried out for this Product

SECTION 16
OTHER INFORMATION

PACKAGING: 1 L, 5 L, 10 L, 20 L, 50 L, 1000 L Plastic containers.

DISCLAIMER:

The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed. All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.