Date of issue/ Date of revision: 14.03.2023Date of previous issue: 23.02.2023Version: 5.0



SAFETY DATA SHEET

YaraVita COPTRAC 500

Section 1. Identification

Product name : YaraVita COPTRAC 500
Product type : Liquid (Suspension)

Product code : PYP24M

<u>Uses</u>

Area of application : Professional applications

Material uses : Fertilizers.

Supplier

Supplier's details : Yara Fertilizers (New Zealand) Limited

<u>Address</u>

Street : 4/211 Heretaunga Street East

Postal code : 4122
City : Hastings
Country : New Zealand

P.O. Box Address

P.O. Box : 8746
Postal code : 4157
City : Hastings
Country : New Zealand

Telephone number : +64 6 877 6600

e-mail address of person : nz.enquiries@yara.com

responsible for this SDS

Emergency telephone number : +64 9929 1483 (7/24)

(with hours of operation)

National advisory body/Poison Center

Name : New Zealand National Poisons Centre

Telephone number : 0800 POISON = 0800 764 766 (NZ only) / +64 3 479 7248

(outside NZ)

Hours of operation : 24h

Section 2. Hazards identification

Date of issue: 14.03.2023 Page:1/14

HSNO Classification : ACUTE TOXICITY (oral) - Category 4

SERIOUS EYE DAMAGE - Category 1

SPECIFIC TARGET ORGAN TOXICITY (REPEATED

EXPOSURE) (kidneys) - Category 2 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1

GHS label elements

Hazard pictograms







Signal word : Danger

Hazard statements: H302 Harmful if swallowed.

H318 Causes serious eye damage.

H373 May cause damage to organs through

prolonged or repeated exposure.

(kidneys)

H410 Very toxic to aquatic life with long lasting

effects.

Precautionary statements

Prevention: P280 Wear protective gloves and eye protection.

P260 Do not breathe vapor or spray.

P270 Do not eat, drink or smoke when using this

product.

Response : P391 Collect spillage.

P305 IF IN EYES:

P351 Rinse cautiously with water for several

minutes.

P338 Remove contact lenses, if present and easy

to do. Continue rinsing.

P310 Immediately call a POISON CENTER or

doctor/physician.

Other hazards which do not

result in classification

None known.

Additional information : None.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	% (w/w)	CAS number
dicopper oxide	>= 35 - < 45	1317-39-1
ethanediol	>= 5 - < 7	107-21-1

Date of issue : 14.03.2023 Page:2/14

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact: Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Check for and remove any

contact lenses. Get medical attention immediately.

Inhalation : Avoid inhalation of vapor, spray or mist. If inhaled, remove to

fresh air. Get medical attention immediately. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.

Skin contact: Wash with soap and water. Continue to rinse for at least 10

minutes. Get medical attention if irritation develops. Get medical attention following exposure or if feeling unwell.

Ingestion : Wash out mouth with water. If material has been swallowed

and the exposed person is conscious, give small quantities of water to drink. Get medical attention if you feel unwell.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Vapor may be irritating to eyes and respiratory system.

Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin contact: No known significant effects or critical hazards.

Ingestion: Harmful if swallowed. May cause burns to mouth, throat and

stomach.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following: pain, watering,

redness

Inhalation : No specific data.
Skin contact : No specific data.

Ingestion: Adverse symptoms may include the following: stomach pains,

May cause burns to mouth, throat and stomach.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist

immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to

be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without

suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Wash contaminated clothing thoroughly

with water before removing it, or wear gloves.

Date of issue: 14.03.2023 Page:3/14

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

None identified.

Specific hazards arising from

the chemical

In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being

discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products Decomposition products may include the following materials: nitrogen oxides, metal oxide/oxides, ammonia, Avoid breathing dusts, vapors or fumes from burning materials., In case of inhalation of decomposition products in a fire, symptoms may be delayed.

Hazchem or Emergency Action Code

Not available.

Special protective actions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Remark Non-explosive.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

Date of issue: 14.03.2023 Page:4/14 Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Not for human or animal consumption.

Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not ingest. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. Avoid breathing vapor or mist. Avoid release to the environment. If during normal use the material presents a respiratory hazard. use only with adequate ventilation or wear appropriate respirator.

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective

Date of issue : 14.03.2023 Page:5/14

equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
dicopper oxide(copper and its inorganic compounds as Cu)	NZ HSWA 2015 - GRWM 2016 (2020-11-01). Skin sensitizer. TWA 0.01 mg/m3 (as Cu) Form: Respirable dust
ethanediol	NZ HSWA 2015 - GRWM 2016 (1994-01-01). CEIL 127 mg/m3 50 ppm Form: VAP_MIST

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: A washing facility or water for eye and skin cleaning purposes should be present. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reusing.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Recommended: Tightly-fitting goggles, Europe:, CEN: EN166,

Skin protection

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. For general applications, we recommend gloves with a thickness typically greater than 0.35 mm. It should be

Date of issue : 14.03.2023 Page:6/14

emphasized that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the

exact composition of the glove material.

Body protection : Personal protective equipment for the body should be selected

based on the task being performed and the risks involved.

Other skin protection : Appropriate footwear and any additional skin protection

measures should be selected based on the task being performed and the risks involved and should be approved by a

specialist before handling this product.

Respiratory protection: In case of inadequate ventilation wear respiratory protection.

Recommended

Filter P2 Europe: EN 143

Personal protective equipment

(Pictograms)







Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid [Suspension]
Color : Red., Brown.,
Odor : Odorless.
pH : 9.6

Melting point/freezing point : -8 °C (18 °F)

Boiling point, initial boiling : 100 °C (212 °F)

point, and boiling range

point, and soming range

Flash point : Not applicable.

Flammability : Non-flammable.

Lower and upper explosion : Lower: Not applicable. limit/flammability limit : Upper: Not applicable.

Vapor pressure : < 23 hPa Relative vapor density : < 1 [Air = 1]

Density : 1.523 g/cm3

Solubility(ies) : Not applicable.

Miscibility with water : Disperses in water Partition coefficient: n- : Not applicable.

octanol/water

Auto-ignition temperature: Not determined.Decomposition temperature: Not applicable.

Date of issue : 14.03.2023 Page:7/14

Viscosity : **Dynamic**: 1,500 - 2,500 mPa.s

Kinematic: Not determined

Explosive properties : Non-explosive. **Oxidizing properties** : Non-oxidizer.

No oxidizing ingredients present.

Particle characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this

product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous :

reactions

Under normal conditions of storage and use, hazardous

reactions will not occur.

Conditions to avoid : Avoid contamination by any source including metals, dust and

organic materials.

Incompatible materials : Urea reacts with calcium hypochlorite or sodium hypochlorite

to form the explosive nitrogen trichloride.

Hazardous decomposition

products

Under normal conditions of storage and use, hazardous

decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Method	Species	Result	Exposure
dicopper oxide				
	OECD 401 LD50 Oral	Rat	1,340 mg/kg	Not applicable.
	OECD 403 LC50 Inhalation Dusts and mists	Rat	3.34 mg/l	4 h
	OECD 402 LD50 Dermal	Rabbit	> 5,000 mg/kg	Not applicable.
ethanediol		•		
	LD50 Oral	Rat	7,712 mg/kg	Not applicable.

Conclusion/Summary : Harmful if swallowed.

Irritation/Corrosion

Date of issue: 14.03.2023 Page:8/14

Product/ingredient name	Method	Species	Result	Exposure
dicopper oxide				
	OECD 405 Eyes	Rabbit	Moderate irritant	21 d

Conclusion/Summary

Skin : No known significant effects or critical hazards.

Eyes : Causes serious eye damage.

Respiratory : No known significant effects or critical hazards.

Sensitization

Product/ingredient name	Method	Species	Result
dicopper oxide			
	OECD 406 Skin	Pig	Not sensitizing

Conclusion/Summary

Skin : No known significant effects or critical hazards.
Respiratory : No known significant effects or critical hazards.

Mutagenicity

Conclusion/Summary: No known significant effects or critical hazards.

Carcinogenicity

Conclusion/Summary : No known significant effects or critical hazards.

Reproductive toxicity

Product/ingredient name	Method	Species	Result	Exposure
dicopper oxide				
	OECD 416 Oral	Rat	Fertility effects- Negative LOAEL > 1500 mg/kg	Not applicable.
	OECD 414 Oral	Rabbit	Developmental- Negative NOAEL 6 mg/kg bw/day	Not applicable.

Conclusion/Summary: No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

No known significant effects or critical hazards.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethanediol	Category 2	oral	kidneys

Date of issue : 14.03.2023 Page:9/14

Aspiration hazard

No known significant effects or critical hazards.

Information on the likely

routes of exposure

Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Vapor may be irritating to eyes and respiratory system.

Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin contact: No known significant effects or critical hazards.

Ingestion : Harmful if swallowed. May cause burns to mouth, throat and

stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following: pain, watering,

redness

Inhalation: No specific data.Skin contact: No specific data.

Ingestion : Adverse symptoms may include the following: stomach pains,

May cause burns to mouth, throat and stomach.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Product/ingredient name	Method	Species	Result	Exposure
dicopper oxide				
	OECD 408	Rat	1,000 mg/kg	92 days 7
	Sub-chronic			days per week
	NOAEL			
	Oral			

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Reproductive toxicity: No known significant effects or critical hazards.

Effects on or via lactation: No known significant effects or critical hazards.

Other effects : May cause damage to organs through prolonged or repeated

exposure.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following: pain, watering,

redness

Inhalation : No specific data.

Date of issue : 14.03.2023 Page:10/14

Skin contact : No specific data.

Ingestion: Adverse symptoms may include the following: stomach pains,

May cause burns to mouth, throat and stomach.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral	Dermal	Inhalation (gases)	Inhalation (vapors)	Inhalation (dusts and mists)
YaraVita COPTRAC 500	1,117.3 mg/kg	N/A	N/A	N/A	7.3 mg/l
dicopper oxide	500 mg/kg	N/A	N/A	N/A	3.34 mg/l
ethanediol	500 mg/kg	N/A	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

		1		·
Product/ingredien	Method	Species	Result	Exposure
t name				
dicopper oxide				
	Acute LC50	Fish	0.08 - 0.28 mg/l	96 h
	Fresh water			
	Acute EC50	Daphnia	0.031 mg/l	48 h
	Fresh water			
	OECD 201	Algae	0.333 mg/l	72 h
	Acute EC50			
	Fresh water			
ethanediol				
	Acute LC50	Fish	> 72,860 mg/l	96 h
	Fresh water			

Conclusion/Summary: Very toxic to aquatic life with long lasting effects.

Persistence/degradability

Conclusion/Summary: No known significant effects or critical hazards.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
ethanediol	-1.36	Not applicable.	low

Conclusion/Summary: No known significant effects or critical hazards.

Mobility in soil

Soil/water partition : Not available. coefficient (KOC)

Mobility : Not available.

Other adverse effects : No known significant effects or critical hazards.

Date of issue : 14.03.2023 Page:11/14

Section 13. Disposal considerations

Product

Methods of disposal

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	IMDG	IATA
UN number	3082	3082	3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dicopper oxide,)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dicopper oxide,)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dicopper oxide,)
Transport hazard class(es)	9	9	9
Packing group	III	III	III
Environmental hazards	Yes.	Yes.	Yes.

Additional information

Date of issue : 14.03.2023 Page:12/14

IMDG : Emergency schedules (EmS) F-A, S-F

14.6 Special precautions for

user

: Transport within user's premises: Ensure that persons transporting the product know what to do in the event of

an accident or spillage.

Transport in bulk according to

IMO instruments

Proper shipping

: Not listed.

name

Section 15. Regulatory information

HSNO Approval Number HSNO Group Standard HSNO Classification : HSR002571.

Fertilisers (Subsidiary Hazard)

ACUTE TOXICITY (oral) - Category 4
SERIOUS EYE DAMAGE - Category 1

SPECIFIC TARGET ORGAN TOXICITY (REPEATED

EXPOSURE) (kidneys) - Category 2 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1

Country information

: SCHEDULE 1 (CONDITIONS OF GROUP STANDARD) of the Fertilisers (Subsidiary Hazard) Group Standard 2006. Any location at which a substance is manufactured or stored in quantities that exceed those set out in the Standards' Tables 3, 4, 5, 6 and 7 must comply with the corresponding conditions as set out in the Standards' clauses 6, 7 and 8.

Inventory list

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Japan inventory (CSCL): All components are listed or exempted. China inventory (IECSC): All components are listed or exempted. Australia inventory (AllC): All components are listed or exempted.

United States inventory (TSCA 8b): All components are active or exempted. EC INVENTORY (EINECS/ELINCS): All components are listed or exempted.

Canada: All components are listed or exempted.

Section 16. Other information

Key to abbreviations

: ADN = European Provisions concerning the International Carriage of

Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of

Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

bw = Body weight

GHS = Globally Harmonized System of Classification and Labelling of

Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From

Date of issue: 14.03.2023 Page:13/14

Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) RID = The Regulations concerning the International Carriage of Dangerous

Goods by Rail

SUSMP - Standard Uniform Schedule of Medicine and Poisons

SGG = Segregation Group UN = United Nations

Key data sources : EU REACH ECHA/IUCLID5 CSR.

National Institute for Occupational Safety and Health, U.S. Dept. of Health, Education, and Welfare, Reports and Memoranda Registry of Toxic Effects of Chemical

Substances.

Sphera Solutions Inc., 4777 Levy Street, St Laurent, Quebec HAR 2P9, Canada. HSNO Chemical Classification and Information database (CCID), New Zealand Inventory of

Chemicals (NZloC),

History

Date of printing: 20.03.2023Date of issue/Date of revision: 14.03.2023Date of previous issue: 23.02.2023

Revision comments : The safety data sheet has been revised according to

Hazardous Substances (Safety Data Sheets) Notice 2017

Version : 5.0

Prepared by : Product Stewardship and Compliance (PSC).

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Date of issue: 14.03.2023 Page:14/14