



SAFETY DATA SHEET

YaraVita COPTRAC 500

Section 1. Identification

Product name : YaraVita COPTRAC 500
Product type : liquid
Product code : PYP24M

Uses

Area of application : Professional applications
Material uses : Fertilizers.

Supplier

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

Address

Street : 43 Plassey Street
Postal code : 4130
City : Havelock North
Country : New Zealand

P.O. Box Address

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

Telephone number : +64 6 877 6600
Fax no. : +64 6 877 6610
e-mail address of person : info.yara@xtra.co.nz
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

Classification and labelling have been performed following the guidelines and recommendation of GHS and the intended use.

Classification of the substance or mixture : 6.1 - ACUTE TOXICITY: ORAL - Category D
6.4 - EYE IRRITATION - Category A (Irritant)
9.1 - AQUATIC ECOTOXICITY - Category A

This material is classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 and has been classified according to the Hazardous Substances (Classifications) Regulations 2001.

This material is classified as a dangerous good according to criteria in New Zealand Standard 5433:2012 Transport of Dangerous Goods on Land.

GHS label elements

Hazard pictograms



Signal word

Hazard statements

- : Warning
- : Harmful if swallowed.
- : Causes serious eye irritation.
- : Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

- : Wear eye protection. Wash hands thoroughly after handling.
- : Avoid release to the environment.

Response

Response

- : Collect spillage.
- : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage

Disposal

- : Not applicable.
- : Not applicable.

Other hazards which do not result in classification

- : None.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product / ingredient name	Identifiers	%
dicopper oxide	CAS: 1317-39-1	>=35 - <50
ETHYLENE GLYCOL	CAS: 107-21-1	>=5 - <7

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** : Rinse with plenty of running water. Check for and remove any contact lenses. If irritation persists, get medical attention.
- Inhalation** : Avoid inhalation of vapor, spray or mist. If inhaled, remove to fresh air. Get medical attention if you feel unwell.
- Skin contact** : Wash with soap and water. Get medical attention if irritation develops.
- 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. Get medical attention if adverse health effects persist or are severe.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : 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. Irritating 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

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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (section 11)

Section 5. Fire-fighting measures**Extinguishing media**

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : 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. 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:
carbon dioxide
carbon monoxide
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.
- 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** : Fire-fighters should wear appropriate protective equipment

for fire-fighters and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Remark : None.

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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised 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

- 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

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. 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

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. Bund storage facilities to prevent soil and water pollution in the event of spillage.

Section 8. Exposure controls/personal protection

Control parameters


Occupational exposure limits

Ingredient name	Exposure limits
dicopper oxide	NZ OSH (1994-01-01) Time Weighted Average (TWA) 0.2 mg/m ³ Form: Fume
ETHYLENE GLYCOL	NZ OSH (1994-01-01) Ceiling 127 mg/m ³ , 50 ppm Form: VAP_MIST

- Recommended monitoring procedures** :
- If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- Appropriate engineering controls** :
- No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure 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** :
- 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. A washing facility or water for eye and skin cleaning purposes should be present.
- 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
- 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.

	:	> 8 hours (breakthrough time): Protective gloves should be worn under normal conditions of use.
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	:	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Personal protective equipment (Pictograms)	:	

Section 9. Physical and chemical properties

Appearance

Physical state	:	liquid
Color	:	Brownish-red.
Odor	:	Not determined.
Odor threshold	:	Not determined.
pH	:	9.6
Melting/freezing point	:	-8 °C (17 °F)
Boiling/condensation point	:	Not determined.
Sublimation temperature	:	Not determined.
Flash point	:	Not determined.
Burning time	:	Not determined.
Burning rate	:	Not determined.
Evaporation rate	:	Not determined.
Flammability	:	Non-flammable.
Lower and upper explosive (flammable) limits	:	Lower: Not determined. Upper: Not determined.
Vapor pressure	:	Not determined.
Relative density	:	1.523
Solubility	:	Not determined.
Partition coefficient: n-octanol/water	:	Not determined.
Auto-ignition temperature	:	Not determined.
Decomposition temperature	:	Not determined.
Viscosity	:	Dynamic: 1,500 - 2,500 mPa.s
	:	Kinematic: Not determined.
Explosive properties	:	None.
Oxidizing properties	:	None.

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	Result	Species	Dose	Exposure	References
dicopper oxide					
	LD50 Oral	Rat - Female	> 928 mg/kg OECD 401	-	IUCLID 5
	LC50 Inhalation	Rat	3.34 mg/l OECD 403	4 h	IUCLID 5
	LD50 Dermal	Rabbit	> 2,000 mg/kg OECD 402	-	IUCLID 5
ETHYLENE GLYCOL					
	LD50 Oral	Rat	4,700 mg/kg	-	VCVGK* - ,139,1984

Conclusion/Summary : Harmful if swallowed.

Irritation/Corrosion

Product / ingredient name	Result	Species	Score	Exposure	Observation	References
dicopper oxide	Eyes - Moderate irritant OECD 405	Rabbit		21 d	-	IUCLID 5

Conclusion/Summary

- Skin** : No known significant effects or critical hazards.
- Eyes** : Causes serious eye irritation.
- Respiratory** : No known significant effects or critical hazards.

Sensitization

Product / ingredient name	Route of exposure	Species	Result	References
dicopper oxide	Skin	Pig	Not sensitizing OECD 406	

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	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure	References
dicopper oxide	-	Negative	-	Rat	Oral: > 1500 mg/kg 416 Two-Generati on Reproducti on Toxicity Study	-	IUCLID 5
dicopper oxide	-	-	Negative	Rabbit	Oral: 6 mg/kg bw/day OECD 414	-	IUCLID 5

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

Teratogenicity

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)

No known significant effects or critical hazards.

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 irritation.
- Inhalation** : 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. Irritating 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

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	Result	Species	Dose	Exposure	References
dicopper oxide	NOAEL Oral	Rat	1000 mg/kg OECD 408	92days 7 days per week	IUCLID 5

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

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

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

Numerical measures of toxicity**Acute toxicity estimates**

Not available.

Section 12. Ecological information**Toxicity**

Product / ingredient name	Result	Species	Exposure	References
dicopper oxide				
	Acute LC50 0.08 - 0.28 mg/l Fresh water	Fish - Labeo boga	96 h	IUCLID 5
	Acute EC50 0.028 - 0.792 mg/l Fresh water OECD 211	Aquatic invertebrates. - Daphnia magna	21 d	IUCLID 5
	Acute EC50 0.333 mg/l Fresh water OECD 201	Aquatic plants - Heterosigma akashiwo	72 h	IUCLID 5
ETHYLENE GLYCOL				
	Acute LC50 16,000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 h	Resour.Publ.No.16 0, U.S.Dep.Interior, Fish Wildl.Serv., Washington, DC :505 p. (USGS Data File)
	Acute LC50 27,540 mg/l Fresh water	Fish - Lepomis macrochirus	96 h	In: D.H.Hemphill and C.R.Cothers

(Eds.), Trace Substances in Environmental Health, Suppl. Volume 12, Proc. Conf. Held in the Hotel Wastin, May 29-June 1, 1989, Cincinnati, OH :371-378

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
ETHYLENE GLYCOL	-1.36-1.36	-	low

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

Mobility in soil

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

Mobility : Not available.

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

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.


Packaging

Methods of disposal : Yara NZ is a member of the Agrecovery Rural Recycling programme for free recycling of plastic containers. Agrecovery services are available for every farmer, grower and agrichemical user throughout New Zealand. Refer to www.agrecovery.co.nz

Section 14. Transport information

Regulation: UN Class	
14.1 UN number	3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dicopper oxide,)
14.3 Transport hazard class(es)	9 
14.4 Packing group	III
14.5 Environmental hazards	Yes.
Additional information	: UN Class
<u>Environmental hazards</u>	: Yes.

Regulation: IMDG	
14.1 UN number	3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dicopper oxide,)
14.3 Transport hazard class(es)	9 
14.4 Packing group	III
14.5 Environmental hazards	Yes.
14.6 Additional information	: IMDG
<u>Marine pollutant</u>	: Yes.
<u>Emergency schedules (EmS)</u>	: F-A, S-F

Regulation: IATA	
14.1 UN number	3082
14.2 UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (dicopper oxide,)
14.3 Transport hazard class(es)	9 
14.4 Packing group	III
14.5 Environmental hazards	Yes.
14.6 Additional information	: IATA
<u>Marine pollutant</u>	: Yes.
<u>Passenger and Cargo Aircraft</u>	
<u>Quantity limitation</u>	: 450.00 L
<u>Packaging instructions</u>	: 964
<u>Cargo Aircraft</u>	
<u>Quantity limitation</u>	: 450.00 L
<u>Packaging instructions</u>	: 964

Special precautions for user : Transport within user's premises: always transport in

closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.'

IMSBC : Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

- New Zealand Inventory of Chemicals (NZIoC)** : All components are listed or exempted.
- HSNO Approval Number** : HSR002571.
- HSNO Group Standard** : Fertilisers (Subsidiary Hazard)
- HSNO Classification** : 6.1 - ACUTE TOXICITY: ORAL - Category D6.4 - EYE IRRITATION - Category A (Irritant)9.1 - AQUATIC ECOTOXICITY - Category A
- 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.

Section 16. Other information

- Key to abbreviations** :
- ADN/ADNR = 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 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 - NOHSC - National Occupational Health and Safety Commission
 - RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
 - SUSDP - Standard for the Uniform Scheduling of Drugs and Poisons
 - UN = United Nations

- References** :
- EU REACH 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.
 - IHS, 4777 Levy Street, St Laurent, Quebec HAR 2P9, Canada.HSNO Chemical Classification and Information database (CCID), New Zealand Inventory of Chemicals (NZIoC),

History

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Prepared by : Yara Product Classifications & Regulations.

|| Indicates information that has changed from previously issued version.

Notice to reader

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