



SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **Carbo Cop**
 Other means of Identification: Fertiliser
 Product Use: The user should seek the advice of the county agricultural representative or a professional agricultural consultant.
 Restriction of Use: Refer to Section 15

New Zealand Supplier: **Hortigro Ltd**
 Address: 164 Manukau Road
 Pukekohe
 Auckland, 2120

Telephone: +64 9 2371777

Emergency No: 0508673800
0800 764 766 (National Poison Centre)

Date of SDS Preparation: 9 April 2018

Section 2. Hazards Identification

This substance is hazardous according to the Hazardous Substances (Classification) Notice 2017

EPA Approval No: Fertilisers (subsidiary) – HSR002571

Pictograms



Toxic/ Irritant



Chronic



Corrosive



Ecotoxic

Signal Word: **DANGER**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.1D (oral)	H302	Harmful if swallowed.	Acute Tox. 4
6.3B	H316	Causes mild skin irritation.	Skin Irrit. 3
6.5B	H317	May cause an allergic skin reaction.	Skin Sens. 1
6.9B	H373	May cause damage to organs through prolonged or repeated exposure.	STOT RE 2
8.3A	H318	Causes serious eye damage.	Eye Corr. 1
9.1A	H400	Very toxic to aquatic life.	Aquatic Acute 1
9.3C	H433	Harmful to terrestrial vertebrates.	-

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P260	Do not breathe fume, vapours or spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective clothing.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P330	Rinse mouth.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

Storage Code	Storage Statement
None allocated	

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3. Composition / Information on Hazardous Ingredients
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Ingredients	Wt%	CAS NUMBER.
Non-Hazardous Ingredients	To bal	N/A
Ammonium sulfate	8-9	7783-20-2
Ammonium hydroxide	8-9	1336-21-6
Copper(II) Hydroxide	6-7	20427-59-2

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention.
If on Skin	Wash with plenty of soap and water. Take off contaminated clothing and wash before re-use. If skin irritation or rash occurs: get medical advice/attention.
If Swallowed	Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. If vomiting occurs naturally, lie on your side in the recovery position. Rinse mouth with water again. Immediately call a Poison Centre or doctor.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms:

Ingestion:	Harmful if swallowed.
Skin:	Causes mild skin irritation.
Eye:	Causes serious eye damage.
Inhalation:	May cause respiratory irritation.
Chronic:	May cause damage to organs through prolonged or repeated exposure.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable
Hazards from combustion products	By heating and fire, irritating vapours/gases may be formed. Carbon monoxide and carbon dioxide.
Suitable Extinguishing media	Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.
Precautions for firefighters and special protective clothing	Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn. Approach fire from upwind to avoid hazardous vapours or gases.
HAZCHEM CODE	3Z

Section 6. Accidental Release Measures

Restrict access to area until completion of cleanup. Ensure cleanup is conducted by trained personnel only. Wear adequate personal protective equipment.

Do not allow into any sewer, on the ground or into any waterway.

Small spills or leaks: contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal.

Large spills or leaks: dike spilled product to prevent runoff. Remove or recover liquid using pumps or vacuum equipment. Do not return spilled product to its original container.

Dispose of waste according to the applicable local and national regulations.

Section 7. Handling and Storage

Precautions for Handling:

- Keep out of reach of children.
- Read label before use.
- Do not breathe fume, vapours or spray.
- Use in a well ventilated area.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid release to the environment.
- Keep away from extreme heat and flame.
- Use caution when opening containers.
- Wear protective clothing.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Store in an area that is: well-ventilated.
- Store in the original, labelled, shipping container.

Section 8 Exposure Controls / Personal Protection**WORKPLACE EXPOSURE STANDARDS (provided for guidance only)**

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³

No ingredients have exposure limits.

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2017 9TH EDITION.

Engineering Controls

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air.

Personal Protection Equipment

Eyes	Wear chemical safety goggles and face shield when contact is possible.
Skin	Wear chemical protective clothing e.g. gloves, aprons, boots.
Respiratory	In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment.

Section 9 Physical and Chemical Properties

Appearance	Liquid
Colour	Dark blue
Odour	Fruity
Odour Threshold	Not available
pH	9-10 (1% solution)
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	Not available
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Relative Density	1.15-1.16 at 20 °C (water = 1)
Water Solubility	Soluble in water
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Particle Characteristics	Not available

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Possibility of hazardous reactions	Not reactive under normal conditions of use.

Conditions to Avoid	Prolonged exposure to high temperatures. Incompatible materials.
Incompatible Materials	Oxidizing agents (e.g. peroxides), strong acids (e.g. hydrochloric acid).
Hazardous Decomposition Products	When heated to decomposition it emits acrid smoke and irritating fumes.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Harmful if swallowed. Mixture rules calculation = LC50 =1897mg/kg
Dermal	Not applicable.
Inhalation	Not applicable.
Eye	Causes serious eye damage.
Skin	Causes mild skin irritation. May cause an allergic skin reaction.

Acute Toxicity - Substances

Chemical Name	LC 50 (Inhalation)	LD50 (oral)	LD50 (dermal)
Ammonium Sulfate	-	640mg/kg (mouse)	-
Ammonium Hydroxide	-	370mg/kg (rat)	-
Copper Hydroxide	-	489mg/kg (rat)	-

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	May cause nose and throat irritation.
STOT/RE	May cause damage to organs through prolonged or repeated exposure.

Section 12. Ecotoxicological Information

HSNO Classes: 9.1A = Very toxic to aquatic life.
9.3C = Harmful to terrestrial vertebrates.

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea
Copper Hydroxide	0.023 mg/L Species: fathead minnow Duration: 96-hour	0.0065mg/l (6.5ppb) Species: Daphnia Duration: 48 hrs
Ammonium Sulfate	48mg/L Species: Catla Catla Duration: 96 hrs Bioaccumulative: No Rapidly Degradable:Yes	81-130mg/L Species: Crangon Crangon Duration: 96hr Bioaccumulative: No Rapidly Degradable:Yes

Ammonium Hydroxide	0.45mg/L Species: Coho Salmon Type of exposure: Flow Through Duration: 96hr Bioaccumulative: No Rapidly Degradable:Yes	0.66mg/l Species: Daphnia Magna Duration: 48hr Bioaccumulative: No Rapidly Degradable:Yes
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Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available

Section 13. Disposal Considerations

Disposal Method:

Empty containers retain product residue. Follow label warnings even if container appears to be empty. Triple rinse and dispose according to Local Regulations.

Precautions or methods to avoid: Do not allow to enter waterways.

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2012

Road and Rail Transport

UN No: 3082
Class-primary 9
Packing Group III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS LIQUIDS, N.O.S.

Air Transport

UN No: 3082
Class-primary 9
Packing Group III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS LIQUIDS, N.O.S.

Marine Transport

UN No: 3082
Class-primary 9
Packing Group III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS LIQUIDS, N.O.S.

Limited Quantities Statement:

If the product's individual container is below 5L/kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15 Regulatory Information

This substance is classified hazardous according to the Hazardous Substances (Classification) Notice 2017

EPA Approval Code: Fertilisers (subsidiary) – HSR002571

HSNO Classification: 6.1D(oral), 6.3B, 6.5B, 6.9B, 8.3A, 9.1A, 9.3C

HSW (HS) Regulations 2017	Trigger Quantity
Signage Trigger Quantities (Schedule 3)	100L (9.1A)
Emergency Response Plan (Schedule 5)	100L (9.1A)
Secondary Containment (Schedule 5)	100L (9.1A)

Product Name: Carbo Cop
Date of SDS: 9 April 2018

Prepared by: Technical Compliance Consultants (NZ) Ltd
Tel: 64 9 475 5240 www.techcomp.co.nz

Tracking (Schedule 26)	Not required
Certified Handlers	Not required
Restriction of Use	Use only as intended.
Hazardous Property Controls Notice 2017	
HPC Notice Part 4 Clause 47	Equipment for class 9 substances must be appropriate
HPC Notice Part 4 Clause 48	Records of application of class 9 pesticides and plant growth regulators
HPC Notice Part 4 Subpart A	Site and storage controls for class 9 substances
HPC Notice Part 4 Subpart C	Qualifications required for application of class 9 pesticides

Section 16 Other Information

Glossary

EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. HSNO Approved Code of Practice: Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

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Please contact the New Zealand distributor, Hortigro, if further information is required.

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