

SAFETY DATA SHEET

According to
HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

Section 1. Identification of the material and the supplier

Product: **Carbenz**
 Product Use: **Fungicide**
 Restriction of Use: Refer to Section 15

New Zealand Supplier: **Agrisource 2000 Ltd**
 Address: 45 Kitchener Road
 Pukekohe, Auckland

Telephone: +64 9 237 0422
Emergency No: 0800 764 766 (National Poison Centre)

Date of SDS Preparation: 15 February 2023

Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No: HSR000453

Pictograms



Signal Word: **DANGER**

GHS Classification and Category	Hazard Code	Hazard Statement
Germ cell mutagenicity Cat. 1	H340	May cause genetic defects.
Reproductive toxicity Cat. 1	H360	May damage fertility or the unborn child.
Specific target organ toxicity – repeated exposure Cat. 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment chronic Cat. 1	H400/410	Very toxic to aquatic life with long lasting effects.
Hazardous to soil organisms	H422	Hazardous to soil organisms

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust, fumes, gas, mist, vapours or spray.
P273	Avoid release to the environment.

P281	Use personal protective equipment as required.
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Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P314	Get medical advice/attention if you feel unwell.
P391	Collect spillage.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.

Storage Code	Storage Statement
P405	Store locked up.

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

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Wt%	CAS NUMBER.
Carbendazim	50%	10605-21-7
Inert ingredients	50%	

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention.

If on Skin In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

If Swallowed Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

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: May cause genetic defects.
 May damage fertility or the unborn child.
 May cause damage to organs through prolonged or repeated exposure.

Section 5. Fire Fighting Measures

Hazard Type	This product is non-flammable, non-explosive and is non-combustible.
Hazards from combustion products	Can give off carbon monoxide and nitrogen oxides in a fire.
Suitable Extinguishing media	Water spray, fog, foam, dry chemical, Carbon dioxide, sand.
Precautions for	Wear protective clothing and self contained breathing apparatus. Do not

firefighters and special protective clothing	breath smoke or gases.
HAZCHEM CODE	3Z

Section 6. Accidental Release Measures

Avoid contact with skin and eyes. Do not inhale spray. Wear long sleeved shirt, long pants, waterproof gloves and safety goggles or face shield. Do not eat, drink or smoke when using. Wash hands and face before meals and after work.

Do NOT allow spilled product or wash solution to enter sewers, drains, dams, creeks or any other waterways.

In the case of spillage, contain spilled material. Keep out animals and unprotected persons. Keep material out of streams and sewers. Vacuum or shovel waste into a drum. To decontaminate spill area, tools and equipment, wash with water. Dispose of contained wastes in accordance with the requirements of Local Authorities.

Section 7. Handling and Storage

Precautions for Handling:

- Read carefully and follow all instructions.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Do not breathe dust, fumes, gas, mist, vapours or spray.
- Avoid release to the environment.
- Use personal protective equipment as required.
- When mixing or applying, avoid breathing dust and contact with skin and eyes.
- Wear protective clothing, gloves and goggles.
- Do not eat or drink while using.
- Wash hands and face before meals and after work.
- Wash protective clothing after work.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Keep out of reach of children.
- Store locked up.
- Store in original container tightly closed and in a locked, dry, cool, well ventilated area, away from feed, seeds and foodstuffs.
- Store in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS8409).

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA ppm mg/m³	STEL ppm mg/m³
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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 APRIL 2022 13TH EDITION.

Engineering Controls

Product Name: Carbenz
Date of SDS: 15 February 2023

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

Ensure ventilation is adequate, as product is used outdoors generally natural ventilation is adequate.

Personal Protection Equipment



Eyes	Wear chemical goggles or face shield.
Skin	Wear elbow-length and PVC gloves. When opening the container, preparing spray and using prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat.
Respiratory	Where insufficient ventilation, use suitable respiratory protection.
General Hygiene	Avoid inhaling aerosols and vapours. Avoid contact with eyes and skin. Store work clothes and street clothes separately. Wash hand before breaks and at the end of work. Change contaminated protective clothing. Keep away from food, drinks and tobacco.

Section 9 Physical and Chemical Properties

Appearance	Liquid
Colour	White/beige
Odour	Practically odourless
Odour Threshold	Not available
pH	6-8
Boiling Point	> 100° C
Melting /Freezing Point	May start to solidify at 0°C
Flash Point	Not available
Flammability	Not flammable
Upper and Lower Explosive Limits	Not available
Vapour Pressure (kPa)	Not available
Vapour Density	Not available
Specific Gravity or Density	Approx. 1.168
Solubility	Soluble in water, methanol, diethyl ether, acetone.
Octanol/water partition coefficient:	Slightly soluble in n-octanol.
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Octanol/Water Particle Coefficient	Not available

Section 10. Stability and Reactivity

Stability of Substance	Stable under normal conditions of use.
Possibility of hazardous reactions	None expected.
Conditions to Avoid	Extreme heat or Cold.
Incompatible Materials	Alkaline materials.
Hazardous Decomposition Products	Oxides of carbon and nitrogen may be given off when exposed to extreme heat or fire.

Section 11 Toxicological Information**Acute Effects:**

Swallowed	Not applicable.
Dermal	Not applicable.
Inhalation	Not applicable.
Eye	Not applicable.
Skin	Not applicable.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	May damage fertility or the unborn child.
Germ Cell Mutagenicity	May cause genetic defects.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	May cause damage to organs through prolonged or repeated exposure.

Toxicological Effects:

Acute toxicity – Oral :	LD ₅₀ > 10 000 mg/kg (rat)
Acute toxicity - Dermal :	LD ₅₀ > 5000 mg/kg (rabbit)
Acute toxicity – Inhalation	LC ₅₀ >5.40 mg/l (rat)

Section 12. Ecotoxicological Information

Very toxic to aquatic life with long lasting effects.
Hazardous to soil organisms.

Product:	
Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available

Data for technical active ingredient:

Toxicity to fish:	Very toxic to aquatic organisms LC 50 = 0.83 mg/L/96h
Toxicity to birds:	Low toxicity to birds LD 50 >5,000mg/kg (Bobwhite quail)
Toxicity to bees:	Non toxic to bees/terrestrial invertebrates.
Toxicity to soil organisms:	Soil half life is 8-32 days.

Do not allow to enter waterways.

Section 13. Disposal Considerations**Disposal Method:**

Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, follow the recommendations in NZS 8409.

Container Disposal: Triple rinse container and add rinsate to spray tank. Dispose of cleaned container at your local AGRECOVERY container collection site.

Precautions or methods to avoid: Avoid release to the environment.

Section 14 Transport Information

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



Road, Rail, Sea and Air Transport

UN No	3082
Class - Primary	9
Packing Group	III
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains 80% carbendazim)
Marine Pollutant	Yes
Special Provisions	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 hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

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HSW (HS) Regulations 2017	Trigger Quantity
Signage Trigger Quantities (Schedule 3)	100L
Emergency Response Plan (Schedule 5)	100L
Secondary Containment (Schedule 5)	100L
Tracking (Schedule 26)	Not required
Certified Handlers	Not required
Location Certificate	Not required
Restrictions of use	Refer to EPA website for full control details www.epa.govt.co.nz
ACVM Registration Number (See www.foodsafety.govt.nz for registration Conditions).	P8219

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

LD ₅₀	inhaling or ingesting it.
LEL	Lethal dose to kill 50% of test animals/organisms.
OSHA	Lower explosive level.
TEL	American Occupational Safety and Health Administration.
TLV	Tolerable Exposure Limit.
UEL	Threshold Limit Value-an exposure limit set by responsible authority.
WES	Upper Explosive Level
	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices APRIL 2022 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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Please contact the Agrisource 2000 Ltd, if further information is required.

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