

## SAFETY DATA SHEET

CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF SAFE WORK AUSTRALIA

### SECTION 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**RICHGRO GARDEN PRODUCTS**

203 Acourt Road  
Jandakot, Western Australia 6164

**EMERGENCY PHONE NUMBER:** (08) 1800 455 132 Monday to Friday 9am to 5pm

**POISONS INFORMATION CENTRE:** Phone (e.g. Australia 13 11 26; New Zealand 0800 764 766).

**TELEPHONE:** (08) 6258 7100 (office hours)

**FACSIMILE:** (08) 9455 1297 Free Fax: 1800 455 132

**EMAIL:** customerservice@richgro.com.au

**PRODUCT NAME**

Richgro Caterpillar, Grasshopper & Millipede Insecticide

**RECOMMENDED USE:**

For the control of caterpillars, grasshoppers and various other insect pests in the home garden.

### SECTION 2 - HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF SAFE WORK AUSTRALIA  
NOT CLASSIFIED AS A DANGEROUS GOOD.  
NOT A SCHEDULED POISON.

**PHYSICAL HAZARDS:** Not Classified

**HEALTH HAZARDS:**

Carcinogenicity – category 2

Acute toxicity – category 4

Acute toxicity – category 4

**ENVIRONMENTAL HAZARDS:**

Hazardous to the aquatic environment (acute) – category 1.

**Label elements**

**GHS Signal Word:** WARNING



**HAZARD STATEMENT:**

H302: Harmful if swallowed.

H312: Harmful in contact with skin.

H332: Harmful if inhaled.

H351: Suspected of causing cancer.

H400: Very toxic to aquatic life.

**PREVENTION**

P102: Keep out of reach of children.

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P261: Avoid breathing fumes, mists, vapours or spray.

P262: Do not get in eyes, on skin, or on clothing.

P264: Wash contacted areas thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well ventilated area.

P273: Avoid release to the environment.

P281: Use personal protective equipment as required.

**RESPONSE**

P363: Wash contaminated clothing before reuse.

P301+P312: IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

# Richgro Caterpillar, Grasshopper & Millipede Insecticide



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P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P308+P313: If exposed or concerned: Get medical advice.

P370+P378: Not combustible. Use extinguishing media suited to burning materials.

## STORAGE

P410: Protect from sunlight.

P404: Store in a closed container.

P403+P235: Store in a well-ventilated place. Keep cool.

## DISPOSAL

P501: Dispose of small quantities and empty containers by wrapping with paper and putting in household waste for landfill. For larger quantities that cannot be recycled, dispose of contents and container to approved landfill (see Section 13 of this SDS).

## SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS Number	Concentration
Carbaryl	63-25-2	100g/L
Other non-hazardous ingredients	Not available	<10g/L
Water	7732-18-5	balance

## SECTION 4 - FIRST AID MEASURES

**GENERAL INFORMATION:** If in doubt, get medical attention promptly. Show this Safety Data Sheet to medical personnel. Carbaryl is an insecticide used on a variety of crops. Acute (short-term) and chronic (long-term) occupational exposure of humans to carbaryl has been observed to cause cholinesterase inhibition, and reduced levels of this enzyme in the blood cause neurological effects. These effects appear to be reversible upon discontinuation of exposure. Headaches, memory loss, muscle weakness and cramps, and anorexia are caused by prolonged low-level exposure to carbaryl resulting from cholinesterase inhibition.

**EYES:** Hold eyelids open and rinse the eye continuously with a gentle stream of clean running water for at least fifteen minutes. Seek medical attention if irritation persists..

**SKIN:** Remove contaminated clothing and wash thoroughly with soap and water. Use water alone, if soap is unavailable. Seek medical attention. Launder affected clothing before re-use.

**INGESTION:** Rinse mouth out with water ensuring that mouth wash is not swallowed. Give about 250mL (2 glasses) of water to drink. DO NOT attempt to induce vomiting. Seek medical attention.

**INHALATION:** First aid is unlikely to be required as a result of exposure during normal use, but spray/mists may cause respiratory tract irritation. If symptoms occur, remove to fresh air. Keep warm and at rest. Seek medical attention if symptoms persist.

### Additional Information:

**First Aid Facilities:** Not required.

**Advice to Doctor:** Treat symptomatically.

## SECTION 5 - FIRE FIGHTING MEASURES

**SUITABLE EXTINGUISHING MEDIA:** Non-combustible liquid. Extinguish fire using whatever is suitable for the primary cause of the fire. Carbon dioxide, dry chemical, foam or water fog are all suitable.

**HAZARDS FROM COMBUSTION PRODUCTS:** This product is likely to decompose only after heating to dryness, followed by further strong heating. Combustion forms oxides of carbon and nitrogen.

**PROTECTIVE EQUIPMENT:** Fire fighters should wear self-contained breathing apparatus. Keep containers as cool as possible by spraying with water from a protected position.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

**EMERGENCY PROCEDURES:** Wear protective equipment as specified for handling (See Section 8).

**SPILLS:** Minor spills do not normally need any special clean-up measures. In the event of a major spill, prevent spillage from entering drains or water courses. Cover with an absorbent such as sand, earth or a commercial oil

absorbent such as vermiculite. Sweep up and collect into labelled containers for recycling or disposal. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services.

## SECTION 7 - HANDLING AND STORAGE

**SAFE HANDLING PRECAUTIONS:** Avoid eye and skin contact. Avoid inhaling spray mists

**SAFE STORAGE PRECAUTIONS:** Keep out of reach of children. Protect the product from light. Keep closed, in the original container, in a cool, well-ventilated area out of direct sunlight.

## SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

### EXPOSURE STANDARDS:

**Carbaryl: E.S. TWA:** 5mg/m<sup>3</sup>

Exposure standards represent the airborne concentration of a particular substance in the worker's breathing zone, exposure to which, according to current knowledge, should not cause adverse health effects nor cause undue discomfort to nearly all workers. The exposure standard can be of three forms; time-weighted average (TWA), peak, or short-term exposure limit (STEL).

**BIOLOGICAL LIMIT VALUES:** None allocated

**ENGINEERING CONTROLS:** Ventilation requirements depend on the quantity of product in use and the method of application. If using large quantities in an indoor area, then mechanical ventilation may be required. Otherwise, natural ventilation is adequate for normal use of this product.

**PERSONAL PROTECTION:** Requirements depend on working conditions, method of application and quantity of product in use. No special equipment is required for handling small quantities, but safety glasses or goggles should be worn if necessary to prevent eye contact. Nitrile, neoprene, PVC or natural rubber gloves should be worn if necessary to prevent skin contact. Respiratory protection is unlikely to be required for normal use of this product. Avoid inhaling spray mists.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES:

<b>Physical Description &amp; colour:</b>	Milky white liquid
<b>Odour:</b>	Negligible
<b>Boiling Point:</b>	Approximately 100°C
<b>Melting Point:</b>	Approximately 0°C
<b>Volatiles:</b>	Water component only.
<b>Vapour Pressure:</b>	17.7 mmHg at 20°C or 2.37 kPa at 20°C (same as water)
<b>Vapour Density:</b>	As for water.
<b>Specific Gravity:</b>	1.00 at 25°C
<b>Water Solubility:</b>	Completely miscible
<b>pH:</b>	No data available.
<b>Volatility:</b>	Negligible.
<b>Evaporation Rate:</b>	Negligible.
<b>Auto ignition temp:</b>	None
<b>Flash point:</b>	None
<b>Upper Flammability Limit:</b>	None
<b>Lower Flammability Limit:</b>	None

## SECTION 10 - STABILITY AND REACTIVITY

**CHEMICAL STABILITY:** Stable under normal conditions of use and storage

**CONDITIONS TO AVOID:** Keep out of reach of children. Avoid exposure to light. Keep in the original container in a cool, well-ventilated area.

**INCOMPATIBLE MATERIALS:** Oxidising agents, strong acids and alkalis.

**HAZARDOUS DECOMPOSITION PRODUCTS:** May evolve toxic fumes if heated to decomposition after the water content has evaporated.

**HAZARDOUS REACTIONS:** None known.

**POLYMERISATION:** Will not occur.

## SECTION 11 - TOXICOLOGICAL INFORMATION

**ACUTE - SWALLOWED:** Headache, fatigue, dizziness, loss of appetite with nausea, stomach cramps and diarrhoea

**ACUTE – EYE:** Symptoms may include stinging and reddening of eyes and watering which may become copious. Other symptoms may also become evident. If exposure is brief, symptoms should disappear once exposure has ceased.

**ACUTE – SKIN:** No symptoms are expected as a result of brief contact. However, prolonged or repeated skin contact may result in toxicity

**ACUTE – INHALED:** Spray mists may be irritating and may result in similar symptoms as for swallowing.

### CHRONIC HEALTH EFFECTS Carbaryl

No specific target organ toxicity has been identified.

Acute (short-term) and chronic (long-term) occupational exposure of humans to carbaryl has been observed to cause cholinesterase inhibition, and reduced levels of this enzyme in the blood cause neurological effects. These effects appear to be reversible upon discontinuation of exposure. Headaches, memory loss, muscle weakness and cramps, and anorexia are caused by prolonged low-level exposure to carbaryl resulting from cholinesterase inhibition

Acute oral toxicity LD50: 225 mg/kg rat

Listed as a category 3 carcinogen (possibly carcinogenic to humans) by Safe Work Australia. The United States Environmental Protection Agency has classified carbaryl as a Group D, not classifiable as to human carcinogenicity. The International Agency for Research on Cancer (IARC), has also listed it as not classifiable as to human carcinogenicity

No additional data available

## SECTION 12 - ECOLOGICAL INFORMATION

Carbaryl is hydrolysed in water. The rate of breakdown depends on the water pH. At pH 7 the half life of Carbaryl is 10-15 days. At pH levels of higher than 8 the half life is in the range of hours or even less. Photodegradation also occurs depending on light penetration.

Carbaryl has low toxicity to molluscs (clams, oysters, mussels), is very toxic to crustacea (water fleas, mysid shrimps) and is moderately toxic to fish.

Range of 96 hr LC<sub>50</sub>'s (fish): 1-30 mg/L

Range of LC<sub>50</sub>'s (Daphnia and mysid shrimps): 8-25 µg/L

**BIODEGRADABILITY:** Carbaryl is moderately to strongly adsorbed to soil (Koc 90-220) and has low mobility in soil. Because carbaryl is rapidly degraded and is not persistent in the environment, it has very low bioaccumulation properties.

**BIOACCUMULATION:** Because carbaryl is rapidly degraded and is not persistent in the environment, it has very low bioaccumulation properties

## SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of small quantities and empty containers by wrapping with paper and putting in household waste for landfill. For larger quantities that cannot be recycled, dispose of contents and container to approved landfill.

## SECTION 14 - TRANSPORT INFORMATION

This product is not a dangerous good according to the Australian Code for the Transportation of Dangerous Goods by Road and Rail (ADG Code), the International Maritime Dangerous Goods Code (IMDG) nor the International Air Transport Association (IATA) criteria.

UN Number: None allocated

Proper shipping name: None allocated

DG Class: None allocated

HazChem code: None allocated

Packing group: None allocated

## **SECTION 15 - REGULATORY INFORMATION**

All ingredients in this formulation are listed in the Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme (NICNAS).

## **SECTION 16 - OTHER INFORMATION**

### **REFERENCES**

1. National Code of Practice: Preparation of Safety Data Sheets for Hazardous Chemicals, 2011
2. Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC: 1003(1995)] and subsequent amendments
3. Australian Code for the Transportation of Dangerous Goods by Road and Rail (ADG Code), 7.7<sup>th</sup> Edition, 2020
4. Standard for the Uniform Scheduling of Medicines and Poisons No. 32, February 2021 and subsequent amendments

### **ABBREVIATIONS**

BOD	Biological oxygen demand
CAS number	Chemical Abstracts Service Registry Number
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
LD50	Lethal Dose for 50% of test population (ingestion or skin contact)
mmHg	Millimetres of mercury
UN Number	United Nations Number

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