

Safety Data Sheet



Hazardous Chemical, Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: **Heiniger Liquid Carbaryl**

Synonyms

Heiniger Liquid Carbaryl, 200mL
Heiniger Liquid Carbaryl, 500mL

Product Code

0129
0130

Recommended use: Liquid insecticide. Controls millipedes, earwigs, caterpillars and other insects in the home garden.

Supplier: Heiniger Home & Garden Care Pty Ltd
ABN: 83 009 342 278
Street Address: 5 Devon Street
Lonsdale, South Australia, 5160
Telephone: 1300 739 399

Emergency Telephone number: 08 9434 0000 (Extended office hours not 24hr)

2. HAZARDS IDENTIFICATION

This material is hazardous according to health criteria of Safe Work Australia.



Signal Word

Warning

Hazard Classifications

Acute Toxicity - Oral - Category 4
Acute Toxicity - Inhalation - Category 4
Carcinogenicity - Category 2
Acute Hazard to the Aquatic Environment - Category 1
Chronic Hazard to the Aquatic Environment - Category 1

Hazard Statements

H302 Harmful if swallowed.
H332 Harmful if inhaled.
H351 Suspected of causing cancer.
H410 Very toxic to aquatic life with long lasting effects.

Prevention Precautionary Statements

P102 Keep out of reach of children.
P103 Read label before use.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing, mist, vapours or spray.
P264 Wash hands, face and all exposed skin 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.

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P281 Use personal protective equipment as required.

Response Precautionary Statements

P101 If medical advice is needed, have product container or label at hand.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.
P330 Rinse mouth.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P391 Collect spillage.

Storage Precautionary Statement

P405 Store locked up.

Disposal Precautionary Statement

P501 Dispose of contents/container in accordance with local, regional, national and international regulations.

Poison Schedule: S5. Caution

DANGEROUS GOOD CLASSIFICATION

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

Dangerous Goods Class: 9

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO	PROPORTION
1-Naphthalenol, methylcarbamate (Carbaryl)	63-25-2	100 g/L
Ingredients determined to be non-hazardous		Balance

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have a qualified person give oxygen through a facemask. If breathing has stopped apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage. Seek immediate medical advice.

Skin Contact: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.

Eye contact: If in eyes wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

Ingestion: Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Immediately call Poisons Centre or Doctor.

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Notes to physician: Treat symptomatically. Anti-cholinesterase effects. Effects may be delayed.
Treatment: Give 2 mg of atropine sulphate intramuscularly or, in severe cases, intravenously, repeated at 10-15 minute intervals until dryness of the mouth occurs. When this response is achieved it is advisable to maintain a mild degree of atropinisation for 24 hours. If stopped too early, pulmonary oedema may develop. Atropine should not be given to a cyanosed patient.

5. FIRE FIGHTING MEASURES

Hazchem Code: •3Z

Suitable extinguishing media: If material is involved in a fire use alcohol resistant foam or dry agent (carbon dioxide, dry chemical powder).

Specific hazards: Non-combustible material.

Fire fighting further advice: Not combustible, however following evaporation of aqueous component residual material can burn if ignited. On burning may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

LARGE SPILLS

Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

Dangerous Goods – Initial Emergency Response Guide No: 47

7. HANDLING AND STORAGE

Handling: Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols.

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Store locked up. Keep container standing upright. Keep containers closed when not in use - check regularly for leaks.

This material is classified as a Class 9 Miscellaneous Dangerous Good as per the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and/or the "New Zealand NZS5433: Transport of Dangerous Goods on Land" and must be stored in accordance with the relevant regulations.

This material is a Scheduled Poison Schedule 5 (Caution) and must be stored, maintained and used in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits:

	TWA		STEL		NOTICES
	ppm	mg/m3	ppm	mg/m3	
Carbaryl	-	5	-	-	-

As published by Safe Work Australia.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Biological Limit Values: As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

Engineering Measures: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Use with local exhaust ventilation or while wearing appropriate respirator. Keep containers closed when not in use.

Personal Protection Equipment: SAFETY SHOES, OVERALLS, GLOVES, SAFETY GLASSES, RESPIRATOR.

Wear safety shoes, overalls, gloves, safety glasses, respirator. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Base Units:	Litres
Form:	Liquid
Colour:	White to off-white suspension
Odour:	Mild, characteristic
Solubility:	Dispersible in water.
Specific Gravity (20 °C):	1.030
Relative Vapour Density (air=1):	>1
Vapour Pressure (20 °C):	N Av
Flash Point (°C):	N App
Flammability Limits (%):	N App
Autoignition Temperature (°C):	N App
Melting Point/Range (°C):	N Av
Boiling Point/Range (°C):	>100
Decomposition Point (°C):	N Av
pH:	N Av
Viscosity:	N Av
Total VOC (g/Litre):	N Av

(Typical values only - consult specification sheet)
N Av = Not available, N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability: This material is thermally stable when stored and used as directed.

Conditions to avoid: Elevated temperatures and sources of ignition.

Incompatible materials: Oxidising agents.

Hazardous decomposition products: Oxides of carbon and nitrogen, smoke and other toxic fumes.

Hazardous reactions: No known hazardous reactions.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

Inhalation: Harmful if inhaled. Anti-cholinesterase effects. May cause decreased heart rate, low blood pressure, excessive production of bodily secretions, constriction of the airways, increase in the fluid pressure inside the eye and diarrhoea.

Skin contact: Contact with skin may result in irritation.

Ingestion: Harmful if swallowed. Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.

Eye contact: May be an eye irritant.

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Acute toxicity

Inhalation: This material has been classified as a Category 4 Hazard.
Acute toxicity estimate (based on ingredients): 10 - 20 mg/L

Skin contact: This material has been classified as non-hazardous.
Acute toxicity estimate (based on ingredients): >2,000 mg/Kg

Ingestion: This material has been classified as a Category 4 Hazard.
Acute toxicity estimate (based on ingredients): 300 - 2,000 mg/Kg

For the constituent:
CARBARYL:
LD50 (Mice): 128 mg/kg

Corrosion/Irritancy: Eye: this material has been classified as not corrosive or irritating to eyes.
Skin: this material has been classified as not corrosive or irritating to skin.

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser.
Skin: this material has been classified as not a skin sensitiser.

Aspiration hazard: This material has been classified as non-hazardous.

Specific target organ toxicity (single exposure): This material has been classified as non-hazardous.

Chronic Toxicity

Mutagenicity: This material has been classified as non-hazardous.

Carcinogenicity: This material has been classified as a Category 2 Hazard.

Reproductive toxicity (including via lactation): This material has been classified as non-hazardous.

Specific target organ toxicity (repeat exposure): This material has been classified as non-hazardous.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as a Category Acute 1 Hazard.
Acute toxicity estimate (based on ingredients): <1 mg/L

For the constituent:
CARBARYL:
48hr LC50 (Daphnia magna): 0.0072 mg/L
72hr EC50 (algae): 0.60 mg/L
96hr EC50 (fish, lake trout): 0.69 mg/L

Long-term aquatic hazard: This material has been classified as a Category Chronic 1 Hazard. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): <1 mg/L, where the substance is not rapidly degradable and/or BCF \geq 500 and/or log $K_{ow} \geq$ 4.

Ecotoxicity: No information available.

Persistence and degradability: The active constituent in this product is not readily biodegradable.

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Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

Australian Special Provisions; AU01: Environmentally Hazardous Substances meeting the description of UN 3077 or UN 3082 are not subject to this Code (ADG 07) when transported by road or rail in;

- (a) packagings that do not incorporate a receptacle exceeding 500 Kg (L); or
- (b) IBCs.



UN No: 3082
Dangerous Goods Class: 9
Packing Group: III
Hazchem Code: •3Z
Emergency Response Guide No: 47

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS CARBARYL)

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1). Note 1: Materials that are fire risks are incompatible with oxidising agents (Class 5.1) or organic peroxides (Class 5.2). Exemptions may apply.

MARINE TRANSPORT

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea. This material is classified as a Marine Pollutant (P) according to the International Maritime Dangerous Goods Code.



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AIR TRANSPORT

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.



UN No: 3082
Dangerous Goods Class: 9
Packing Group: III

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS CARBARYL)

15. REGULATORY INFORMATION

This material is not subject to the following international agreements:

Montreal Protocol (Ozone depleting substances)
The Stockholm Convention (Persistent Organic Pollutants)
The Rotterdam Convention (Prior Informed Consent)

This material is subject to the following international agreements:

Basel Convention (Hazardous Waste)

- Wastes from the production, formulation and use of biocides and phytopharmaceuticals

International Convention for the Prevention of Pollution from Ships (MARPOL)

- Annex III - Harmful Substances carried in Packaged Form

This material/constituent(s) is covered by the following requirements:

- The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) established under the Therapeutic Goods Act (Commonwealth).
- All components of this product are listed on or exempt from the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Reason for issue: First issue

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

Safety Data Sheets are updated frequently. Please ensure you have a current copy.