

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name:	MacPhersons Seneca Insecticide
Other means of identification:	Not Applicable
Recommended use of the chemical and restrictions on use:	Agricultural insecticide for use as described on the product label.
Supplier:	Eurochem Pty Ltd
Street address:	9 Heales Rd, Lara, VIC 3212
Telephone no.:	+61 427 453 101
Fax:	Not Available
Website:	www.eurochem.com.au
Emergency telephone:	Poisons Information Centre 13 11 26 (24 hours)

2. HAZARDS IDENTIFICATION

Classification of the substance mixture: This material is classified as hazardous according to the classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition).

Classification of the substance or mixture:

Flammable liquids category 2
Acute Toxicity (Dermal) Category 3
Acute Toxicity (Oral) Category 2
Eye irritation Category 2A
Hazardous to Aquatic Environment Acute Category 2

SIGNAL WORD: DANGER

Hazard Statement(s):

H225 – Highly flammable liquid and vapour
H330 - Fatal if inhaled
H300 - Fatal if swallowed
H319 - Causes serious eye irritation
H401 – Toxic to aquatic life

Precautionary Statement(s):

P210 – Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P233 – Keep container tightly closed.
P240 – Ground/bond container and receiving equipment.
P241 – Use explosion-proof electrical/ventilating/lighting/.../equipment.
P242 – Use only non-sparking tools.
P243 – Take precautionary measures against static discharge.
P280 – Wear protective gloves/protective clothing/eye protection/face protection.
P303 + P361 + P353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P370 + P378 – In case of fire: Use appropriate fire extinguisher for extinction.
P403 + P235 – Store in a well-ventilated place. Keep cool.
P501 – Dispose of contents/container in accordance with local regulations.

P264 – Wash hands thoroughly after handling.
 P270 – Do not eat, drink or smoke when using this product.
 P301 + P310 – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 P321 – Treat Symptomatically
 P330 – Rinse mouth.
 P405 – Store locked up.
 P501 – Dispose of contents/container in accordance with local regulations.
 P260 – Do not breathe dust/fume/gas/mist/vapours/spray.
 P271 – Use only outdoors or in a well-ventilated area.
 P284 – Wear respiratory protection.
 P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P310 – Immediately call a POISON CENTER or doctor/physician.
 P320 – Specific treatment is urgent (see ... on this label).
 P403 + P233 – Store in a well-ventilated place. Keep container tightly closed.
 P501 – Dispose of contents/container in accordance with local regulations.
 P264 – Wash hands thoroughly after handling.
 P280 – Wear protective gloves/protective clothing/eye protection/face protection.
 P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337 + P313 – If eye irritation persists: Get medical advice/attention.
 P273 – Avoid release to the environment.
 P501 – Dispose of contents/container in accordance with local regulations.

PICTOGRAM:


3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion
Methanol	67-56-1	50-60%
Methomyl	16752-77-5	25%
Other non-hazardous ingredients	Various	Balance

4. FIRST AID MEASURES

If poisoning occurs, contact a Poisons Information Centre. Phone Australia 131126; New Zealand 0800 764 766 or a doctor. Have this SDS or the label with you.

Inhalation: Remove the victim to fresh air. Apply artificial respiration. Seek medical attention immediately.
Skin contact: Remove contaminated clothing and wash with plenty of water and soap. If symptoms develop, seek medical attention.
Eye contact: If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes. Seek medical advice. Take special care if exposed person is wearing contact lenses.
Ingestion: If swallowed, wash mouth with water and contact a Poisons Information Centre or call a doctor. Do not induce vomiting. Give activated charcoal if instructed.
First aid facilities: Eyewash and normal washroom facilities.

Medical attention and special treatment needed: Treat Symptomatically

5. FIRE FIGHTING MEASURES

This product is classified as flammable. There is a moderate risk of an explosion from this product if commercial quantities are involved in a fire.

Flash point - 12°C (Closed cup)

Suitable extinguishing media: In case of fire, use carbon dioxide, dry chemical, foam, water fog. Do not use full water jet.

Specific hazards arising from the substance or mixture: Fire decomposition products from this product may be toxic if inhaled; do not inhale gases/smoke. Take appropriate protective measures.

Special protective equipment and precautions for fire-fighters: In case of fire and/or explosion do not breathe fumes. Cool containers at risk with water spray jet. If possible, remove containers from endangered area. Wear self-contained breathing apparatus and chemical-protective clothing. Keep containers cool by spraying with water if exposed to fire. Collect contaminated extinguishing water separately. Do not allow contaminated water to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/ Environmental precautions: In the event of a spill, prevent spillage from entering drains or water courses with absorbent material and call emergency services.

Personal precautions/ Protective equipment: Wear full protective clothing including eye/face protection. All skin areas should be covered. It is good practice to wear impermeable gloves when handling chemical products. Provide adequate ventilation. If there is a significant chance that vapours or mists are likely to build up in the clean-up area, we recommend that you use a respirator. Refer to protective equipment as described in Section 8 of this safety data sheet.

Methods and materials for containment and cleaning up: Contain - prevent run off into drains and waterways. Stop leak if safe to do so and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Because of the environmentally hazardous nature of this product, special care should be taken to restrict release to waterways or drains. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage and dispose of promptly. Recycle containers wherever possible after careful cleaning. Refer to product label for specific instructions. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this SDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

7. HANDLING AND STORAGE

Precautions for safe handling: Ensure adequate ventilation. Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Keep containers closed at all times - check regularly for leaks or spills. Transport and store upright. Refer to Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under 'Storage' should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Conditions for safe storage, including any incompatibilities:

Store packages of this product in a cool place. Protect from open fire, heat and direct sunlight. Keep away from food, drink and animal feeding stuffs. Keep away from sources of ignition - No smoking. Keep in a cool, dry and well-ventilated place. Make sure that containers of this product are kept tightly closed. Keep containers dry and away from water. Make sure that the product does not come into contact with substances listed under 'Incompatibilities' in Section 10. Check packaging - there may be further storage instructions on the label.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters: Exposure guidelines have not been established for this product by Safe Work Australia. However, the following standard applies to one of the ingredients in this product:
Methanol – 262mg/m³ (TWA), 328mg/m³ (STEL)
Methomyl – 2.5mg/m³ (TWA)

Appropriate engineering controls: Use in well ventilated areas. If natural ventilation is inadequate, use of a fan is suggested. Keep containers closed when not in use. Do not breathe vapours/aerosols. Use good personal hygiene practices-wash hands at breaks and when done working with material. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke while working. Avoid contact with skin, eyes and clothes.

Individual protection measures, such as Personal Protective Equipment (PPE):

See container label safety directions. The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

Observe good standards of hygiene and cleanliness. Always wash hands, arms and face thoroughly with soap and water before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment with detergent and warm water before storage or re-use.

Respiratory protection: Respiratory protective equipment is not needed under normal and intended conditions of product use. However, if protection is required, Wear suitable protective breathing mask (EN 136) with filter A2-P2 (EN 14387) and consult AS/NZS 1715 and AS/NZS 1716 for further information.

Eye and face protection: Avoid contact with eyes. Eye and face protection is not needed under normal and intended conditions of product use, however safety glasses with side protection should be worn as a general precaution. If protection is required consult AS/NZS 1336 and AS/NZS 1337 for further information. Consult AS/NZS 1336 and AS/NZS 1337 for further information. Safety glasses with side protection (EN 166)

Skin protection: Avoid contact with skin. Elbow-length rubber or chemical resistant gloves must be worn when opening the container and using the product. Always check with the glove manufacturer or your personal protective equipment supplier regarding the correct type of glove to use. Consult AS/NZS 2161 for further information. Trousers, long sleeved shirt /cotton overalls buttoned to the neck and wrist and closed in shoes or safety footwear should also be worn as a general precaution. Consult AS/NZS 2210 and AS/NZS 2919 for further information. People with high-risk exposure, chemical suits (EN ISO 6530:2005) and boots may be required (EN ISO 20345:2012).

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Clear liquid
Colour:	Blue
Odour:	Sulfurous odour
pH:	Not determined
Specific gravity:	0.9 approx.
Melting point/Freezing point:	Not determined
Boiling point/range:	Solvent (methanol) boils about 65°C
Flash point:	12°C (Closed cup)
Upper Flammability Limit:	Not determined
Lower Flammability Limit:	Not determined

Evaporation point:	Not determined
Vapour pressure:	Not determined
Vapour density:	Not determined
Solubility:	Soluble
Partition coefficient: n- octanol/water	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	Not determined

10. STABILITY AND REACTIVITY

Reactivity:	This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.
Chemical stability:	Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Possibility of hazardous reactions:	The product is stable under recommended storage and handling conditions
Conditions to avoid:	Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.
Incompatible materials:	None known.
Hazardous decomposition products:	Under normal use conditions no hazardous decomposition products are expected. In case of fire/explosion vapours dangerous for health are spread.

11. TOXICOLOGICAL INFORMATION

An information profile for Methomyl is available at <http://extoxnet.orst.edu/pips/ghindex.html>

Acute toxicity: Methomyl is highly toxic orally, with reported oral LD50 values of 17 to 24 mg/kg in rats, 10 mg/kg in mice, and 15 mg/kg in guinea pigs. It is moderately toxic via inhalation with a reported 4-hour inhalation LC50 in male rats of 0.3 mg/L. It is slightly toxic via the dermal route, with a reported dermal LD50 of 5880 mg/kg in rabbits, and is absorbed only slowly through the skin. However, if sufficient amounts are absorbed through the skin, symptoms similar to those induced by ingestion or inhalation will develop.

Chronic toxicity: Prolonged or repeated exposure to Methomyl may cause symptoms similar to the pesticide's acute effects. Repeated exposure to small amounts of Methomyl may cause an unsuspected inhibition of cholinesterase, resulting in flu-like symptoms, such as weakness, lack of appetite, and muscle aches. Cholinesterase-inhibition may persist for two to six weeks. This condition is reversible if exposure is discontinued. It is not likely that chronic effects would be seen in humans unless exposures were unexpectedly high, as with chronic misuse.

Reproductive effects: Methomyl fed to rats at dietary doses of 2.5 or 5 mg/kg for three generations caused no adverse effect on reproduction, nor was there any evidence of congenital abnormalities. Based on these data it appears unlikely that Methomyl will have reproductive effects.

Teratogenic effects: No teratogenic effects were found in the fetuses of female rabbits that were fed approximately 15 to 30 mg/kg/day during the 8th to 16th day of gestation. Thus, Methomyl does not appear to be teratogenic.

Mutagenic effects: There is no evidence, despite numerous studies, that Methomyl is a mutagenic or genotoxic.

Carcinogenic effects: There was no evidence of carcinogenicity in either rats or dogs that ingested high doses of Methomyl in 2-year feeding studies. The evidence suggests that Methomyl is not carcinogenic.

Organ toxicity: Lungs, skin, eyes, gastrointestinal tract, kidneys, spleen, and blood-forming organs have been affected in various experiments, depending on route of entry, duration of exposure, and dosage.

Fate in humans and animals: Methomyl is quickly absorbed through the skin, lungs, and gastrointestinal tract and are broken down in the liver. Breakdown products are readily excreted via respiration and urine. Although they do not appear to accumulate in any particular body tissue, they may alter many other enzymes besides the cholinesterases.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Effects on birds: Methomyl is highly toxic to birds. The acute oral LD50 in bobwhite quail is 24.2 mg/kg. The oral LD50 of Methomyl is 28 mg/kg in hens. All deaths occurred within ten minutes of dosing. The clinical signs of toxicity included tearing of the eyes, salivation, occasional convulsions, and respiratory disorders. In Japanese quail, the LD50 is 34 mg/kg. The LD50 of a 90% pure formulation is 15.9 mg/kg in eight-month-old mallards, and 15.4 mg/kg in three- to four-month-old male pheasants. The LD50 for starlings is 42 mg/kg and for red winged blackbirds is 10 mg/kg.

Effects on aquatic organisms: Methomyl is moderately to highly toxic to fish and highly toxic to aquatic invertebrates. A 28-day fish residue study indicated that Methomyl did not accumulate in fish tissue. Methomyl is unlikely to bioconcentrate in aquatic systems.

Effects on other organisms: Methomyl is highly toxic to bees both by direct contact and through ingestion. The LD50 for a 90% pure formulation of Methomyl is 11.0 to 22.0 mg/kg in mule deer. Symptoms of acute poisoning in these animals included drowsiness, drooling, diarrhoea, and tremors.

Environmental Fate:

Breakdown in soil and groundwater: Methomyl has low persistence in the soil environment, with a reported half-life of approximately 14 days. Because of its high solubility in water, and low affinity for soil binding Methomyl may have potential for groundwater contamination. It is very mobile in sandy loam and silty clay loam soils, but only slight leaching was observed in a silt loam and in a sandy soil. Methomyl is rapidly degraded by soil microbes. Methomyl residues are not expected to be found in treated soil after the growing season in which it is applied.

Breakdown in water: Aqueous solutions of Methomyl have been reported to decompose more rapidly on aeration, in sunlight, or in alkaline media. The estimated aqueous half-life for the insecticide is 6 days in surface water and over 25 weeks in groundwater. In one experiment, the hydrolysis half-lives of Methomyl in solutions at pHs of 6.0, 7.0 and 8.0 were 54, 38, and 20 weeks respectively. In pure water, the hydrolysis half-life has been estimated to be 262 days.

Breakdown in vegetation: Following soil treatment, plants take up Methomyl through their roots and move it throughout the plant by a process called "translocation." When Methomyl is applied to plants, its residues are short-lived. After it is applied to leaves, it has a 3 to 5 day half-life. Less than 3% Methomyl remained in cabbage plants 1 week after they were given foliar treatment with the insecticide.

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Refer to Waste Management Authority. Dispose of contents/container in accordance with local/regional/national/international regulations. Break, crush or puncture and dispose of empty containers in a local authority landfill. Triple rinse and bury rinsate and empty capsules in a local authority landfill. If no landfill is available, bury the containers below 0.5m in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product must not be burnt. Do NOT re-use containers for any other purpose.

14. TRANSPORT INFORMATION

UN Number	2758
Shipping Name	CARBAMATE PESTICIDE, LIQUID, FLAMMABLE, TOXIC
Class	3
Packaging Group	II

15. REGULATORY INFORMATION

Poison schedule S7
(SUSMP):

APVMA/TGA approval 59697

no.:

AICS: All the constituents of this material are either listed on the Australian Inventory of Industrial Chemicals (Inventory), not required due to the nature of the chemical, or have been assessed under the Industrial Chemicals Act 2019 as amended.

16. OTHER INFORMATION

General information: None.

Issue number: 002

Issue date: 25/05/2026

In any event, the review and, if necessary, the re-issue of an SDS shall be no longer than 5 years after the last date of issue.

Reason(s) for issue: New SDS

Literary reference: ADG Code - Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition)

APVMA – Agricultural Pesticides and Veterinary Medicines Australia

GHS - Globally Harmonised System of Classification and Labelling of Chemicals (3rd revised edition) 2009

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice

STEL - Short term exposure limit means the average airborne concentration of a substance calculated over a 15-minute period. The STEL should not be exceeded at any time during a normal eight hour working day.

SUSMP - Standard for the Uniform Scheduling of Medicines & Poisons

SWA - Safe Work Australia, formerly ASCC and NOHSC

TWA - Time-weighted average means the average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

WHS – Workplace Health and Safety

The physical values and properties described in this SDS are typical values based on scientific literature and material produced to date, and are believed to be reliable. The supplier provides no warranties, either expressed or implied and assumes no responsibility for the accuracy or completeness of the data contained herein. The information is supplied upon the condition that the persons receiving information will make their own determination as to the suitability for their purposes prior to use of this product. Due care should be taken to ensure that the use of this product and its disposal is in compliance with all relevant Federal, State and Local Government regulations.

END SDS