

Section 1 - Identification of The Material and Supplier

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Chemical nature: Water Dispersible Granule (WG) formulation containing chlorothalonil
Trade Name: **Sabakem Chlorothalonil 900 WG Fungicide**
APVMA Code: 89048
Product Use: Agricultural fungicide for use as described on the product label.
Creation Date: **May, 2020**
This version issued: **August, 2025** and is valid for 5 years from this date.
Emergency telephone: **Poisons Information Centre 13 11 26 (24 hours)**

Section 2 - Hazards Identification

Statement of Hazardous Nature

This product is classified as hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

ADG Classification: Class 6.1: Toxic Substances.
UN Number: 2761, PESTICIDE, SOLID, TOXIC, N.O.S.

Classification of the substance or mixture:

Acute Toxicity (Inhalation) Category 2
Serious Eye Damage Category 1
Skin Sensitisation Category 1
Carcinogenicity Category 2
Specific Target Organ Toxicity - Single Exposure Category 3



The following environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:

Acute Aquatic Toxicity Category 1
Chronic Aquatic Toxicity Category 1



GHS Signal word: DANGER

HAZARD STATEMENTS:

H330: Fatal if inhaled.
H318: Causes serious eye damage.
H317: May cause an allergic skin reaction.
H351: Suspected of causing cancer.
H335: May cause respiratory irritation.
H410: Very toxic to aquatic life with long lasting effects.

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PRECAUTIONARY STATEMENTS:**PREVENTION**

P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P260: Do not breathe fumes, mists, vapours or spray.
P271: Use only outdoors or in a well-ventilated area.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves, protective clothing and eye or face protection.
P284: Wear respiratory protection.

RESPONSE

P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313: If exposed or concerned: Get medical advice.
P310: Immediately call a POISON CENTRE or doctor/physician.
P312: Call a POISON CENTRE or doctor if you feel unwell.
P321: Specific treatment (see the label).
P333+P313: If skin irritation or rash occurs: Get medical advice.
P362 + P364: Take off contaminated clothing and wash it before reuse.
P391: Collect spillage.

STORAGE

P405: Store locked up.
P403 + P233: Store in a well-ventilated place. Keep container tightly closed.
P410: Protect from sunlight

DISPOSAL

P501: Dispose of contents and containers as specified on the registered label.

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc. (% w/v)
Chlorothalonil	1897-45-6	90.0

Other components are not considered hazardous in this formulation and therefore are not required to be disclosed according to the WHS Regulations.

Section 4 - First Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

Inhalation: If inhalation occurs, contact a Poisons Information Centre. Urgent hospital treatment is likely to be needed. Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. DO NOT allow victim to move about unnecessarily. Symptoms of pulmonary oedema can be delayed up to 48 hours after exposure.

Skin Contact: Quickly and gently brush away excess particles. Seek immediate medical attention. Remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Flush contaminated area with lukewarm, gently flowing water for at least 20-30 minutes, by the clock. DO NOT INTERRUPT FLUSHING. If necessary, keep emergency vehicle waiting (show paramedics this SDS and take their advice). If irritation persists, repeat flushing. Seek medical attention.

Eye Contact: Quickly and gently brush particles from eyes. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 20-30 minutes, by the clock, while holding the eyelid(s) open. Neutral saline solution may be used as soon as it is available. DO NOT INTERRUPT FLUSHING. If necessary, keep emergency vehicle waiting (show paramedics this SDS and take their advice). Take care not to rinse contaminated

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water into the unaffected eye or onto face. If irritation persists, repeat flushing. Call a Poisons Information Centre or a doctor urgently. Take special care if exposed person is wearing contact lenses.

Ingestion: If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre or call a doctor.

First Aid Facilities: Eyewash and normal washroom facilities. Safety deluge showers should, if practical, be provided near to where this product is being used.

Major Health Hazards: Chlorothalonil can cause severe eye and skin irritation in certain formulations. Very toxic by inhalation, limited evidence of a carcinogenic effect, may cause serious damage to eyes, respiratory tract irritant, possible skin sensitisier.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is little risk of an explosion from this product if commercial quantities are involved in a fire. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures. Flammability Class: No data.

Suitable Extinguishing Media: In case of fire, use carbon dioxide, dry chemical, foam or water fog. Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal foam can be used. Try to contain spills, minimise spillage entering drains or water courses.

Special Protective Equipment and Precautions for Fire Fighters: When fighting a major fire wear self-contained breathing apparatus and protective equipment.

Hazchem Code: 2Z

Section 6 - Accidental Release Measures

Environmental precautions: In the event of a major spill, prevent spillage from entering drains or water courses with absorbent material. Because of the environmentally hazardous nature of this product, special care should be taken to restrict release to waterways or drains.

Methods and materials for containment and cleaning up: 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. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage and dispose of promptly. Consider vacuuming if appropriate. Recycle containers wherever possible after careful cleaning. Refer to product label for specific instructions. After spills, wash area preventing runoff from entering drains. 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.

Personal precautions, protective equipment and emergency procedures: Suitable equipment materials include PVC. Eye/face protective equipment should comprise, as a minimum, protective goggles. Eye/face protective equipment should include a full-face shield. If there is a significant chance that dusts are likely to build up in cleanup area, we recommend that you use a suitable dust mask. Use impermeable gloves with care. Usually, no respirator is necessary when using this product however, if there is a significant chance that vapours or mists are likely to build up in the cleanup area, we recommend that you use a suitable respirator. Refer to section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

If a significant quantity of material enters drains, advise emergency services.

Section 7 - Handling and Storage

Precautions for Safe Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check 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.

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Conditions for Safe Storage: This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. Some liquid preparations settle or separate on standing and may require stirring before use. Check packaging - there may be further storage instructions on the label.

Section 8 - Exposure Controls and Personal Protection

Exposure Standards: Exposure limits have not been established by SWA for any of the significant ingredients in this product.

Engineering Controls: Ensure adequate ventilation of the working area.

Respiratory Protection: Ensure the work environment remains clean and that vapours, dust and mists are minimised. If there is a significant chance that dusts are likely to build up in the area where this product is being used, we recommend that you use a suitable dust mask. Safety deluge showers should, if practical, be provided near to where this product is being handled commercially. If ventilation is inadequate, suitable respiratory protection should be worn, consult AS/NZS 1715 and AS/NZS 1716 for further information.

Eye and Face Protection: Your eyes must be completely protected from this product by splash resistant goggles with face shield. All surrounding skin areas must be covered. Emergency eye wash facilities must also be available in an area close to where this product is being used. See Australian/New Zealand Standard Industrial Eye Protection: AS1336 and AS/NZS 1337 for more information. Failure to protect your eyes may cause them harm. Emergency eye wash facilities should be provided in an area close to where this product is being used.

Skin Protection: Prevent skin contact by wearing impervious gloves, clothes and, preferably, apron. PVC gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered. Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard Occupational Protective Clothing: AS/NZS 4501 and Occupational Protective Footwear: AS/NZS2210 for more information.

Section 9 - Physical and Chemical Properties

Physical Description & colour: Granules, no data regarding colour.

Odour: No data.

Boiling Point: Not available.

Flash Point: No data.

Freezing/Melting Point: No specific data. Solid at normal temperatures.

Volatiles: No data.

Vapour Pressure: No data.

Vapour Density: Not applicable.

Specific Gravity: No data.

Water Solubility: Dispersible

pH: No data.

Volatility: No data.

Odour Threshold: No data.

Evaporation Rate: Not applicable.

Coeff Oil/water Distribution: No data

Autoignition temp: No data.

Section 10 - Stability and Reactivity

Possibility of Hazardous Reactions: 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. This product will not undergo polymerisation reactions.

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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.

Incompatibilities: Strong acids, strong bases, strong oxidising agents.

Fire Decomposition: Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed. May form hydrogen chloride gas, other compounds of chlorine. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

Section 11 - Toxicological Information

Acute Toxicity: Product causes acute toxicity via inhalation and is fatal if inhaled.

Following is the acute toxicity data available for the active constituent Chlorothalonil:

Acute oral toxicity - LD50 (Rat) > 10000 mg/kg; LD50 (Mice) > 6000 mg/kg;

Acute dermal toxicity - LD50 (Rat, Rabbit) > 10000 mg/kg

Acute inhalation toxicity - LC50 (Rat): 0.1 mg/L, 4 hr

If inhaled symptoms may include headache, irritation of nose and throat and increased secretion of mucous in the nose and throat. Other symptoms may also become evident, but they should disappear after exposure has ceased. If ingested product is not harmful however may be irritating to mucous membranes but is unlikely to cause anything more than transient discomfort.

Chlorothalonil is not harmful to mammals, but it can cause severe eye and skin irritation in certain formulations. Very high doses may cause a loss of muscle coordination, rapid breathing, nose bleeding, vomiting, hyperactivity, and death. Dermatitis, vaginal bleeding, bright yellow and/or bloody urine, and kidney tumours may also occur. In albino rabbits, 3 mg of chlorothalonil applied to the eyes caused mild irritation that subsided within 7 days of exposure.

Skin Corrosion/Irritation: Based on classification principles, the classification criteria are not met.

Product may cause irritation but is unlikely to cause anything more than mild transient discomfort.

Serious Eye Damage/Irritation: Causes serious eye damage.

This product is a severe eye irritant. Symptoms may include stinging and reddening of eyes and watering which may become copious. Other symptoms such as swelling of eyelids and blurred vision may also become evident. If exposure is brief, symptoms should disappear once exposure has ceased. However, lengthy exposure or delayed treatment is likely to cause permanent damage.

Respiratory or Skin Sensitisation: May cause an allergic skin reaction.

Persons sensitised to chlorothalonil should avoid contact with this product.

Classified as a potential sensitisier by skin contact. Exposure to a skin sensitisier, once sensitisation has occurred, may manifest itself as skin rash or inflammation, and in some individuals this reaction can be severe.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Mutagenicity studies on various animals, bacteria, and plants indicate that chlorothalonil does not cause any genetic changes. The compound is not expected to pose mutagenic risks to humans.

Carcinogenicity: Suspected of causing cancer.

Chlorothalonil is classed 2b IARC - possibly carcinogenic to humans by IARC.

Based on evidence from animal studies, chlorothalonil's carcinogenic potential is unclear. Male and female rats fed chlorothalonil daily over a lifetime developed carcinogenic and benign kidney tumours at the higher doses. In another study, where mice were fed high daily doses of chlorothalonil for 2 years, females developed tumours in the fore-stomach area (attributed to irritation by the compound) and males developed carcinogenic and benign kidney tumours.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met. Studies suggest that chlorothalonil will not affect human reproduction at expected exposure levels.

Teratogenic effects: Long-term studies indicate that high doses fed to rats caused reduced weight gains for males and females in each generation studied. A study of birth defects in rabbits showed no effects. Chlorothalonil is not expected to produce birth defects in humans.

Specific Target Organ Toxicity (STOT)—single exposure: May cause respiratory irritation.

Specific Target Organ Toxicity (STOT)—repeated exposure: Based on classification principles, the classification criteria are not met.

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Aspiration Hazard: Based on classification principles, the classification criteria are not met.

Chronic Health Effects: In a number of tests of varying lengths of time, rats fed a range of doses of chlorothalonil generally showed no effects on physical appearance, behaviour, or survival. Skin contact with chlorothalonil may result in dermatitis or light sensitivity. Human eye and skin irritation is linked to chlorothalonil exposure; 14 of 20 workers exposed to 0.5% chlorothalonil in a wood preservative developed dermatitis. All workers showed swelling and inflammation of the upper eyelids. Allergic skin responses have also been noted in farm workers.

Organ toxicity: Chronic studies of rats and dogs fed high dietary levels show that chlorothalonil is toxic to the kidney. In addition to less urine output, changes in the kidney included enlargement, greenish-brown colour, and development of small grains.

Fate in humans and animals: Chlorothalonil is rapidly excreted, primarily unchanged, from the body. It is not stored in animal tissues. Residues have not been found in the tissues or milk of dairy cows fed chlorothalonil.

Additional toxicological information: The ADI for Chlorothalonil is set at 0.01mg/kg/day & the corresponding NOEL is set at 1.5mg/kg/day (Data from Australian ADI List, March 2017). ADI means Acceptable Daily Intake; NOEL means No-observable-effect-level.

Section 12 - Ecological Information

Ecotoxicity: Very toxic to aquatic life with long lasting effects. Avoid contaminating waterways.

Effects on aquatic organisms: Chlorothalonil and its metabolites are highly toxic to fish, aquatic invertebrates, and marine organisms. Fish, such as rainbow trout, bluegill, and channel catfish are noticeably affected even when chlorothalonil levels are low (less than 1 mg/L).

Effects on birds: Chlorothalonil is practically nontoxic to birds. Most avian wildlife is not significantly affected by this compound.

Effects on other organisms: The compound is nontoxic to bees.

Persistence and Degradability:

Breakdown in soil and groundwater: Chlorothalonil is moderately persistent. In aerobic soils, the half-life is from 1 to 3 months.

Breakdown in water: In very basic water (pH 9.0), about 65% of the chlorothalonil was degraded into two major metabolites after 10 weeks.

Breakdown in vegetation: Chlorothalonil's residues may remain on above-ground crops at harvest but will dissipate over time. Chlorothalonil is a fairly persistent fungicide on plants, depending on the rate of application.

Bioaccumulative Potential: The bioaccumulation potential of chlorothalonil is low.

Mobility in Soil: The mobility of chlorothalonil is medium.

Section 13 - Disposal Considerations

Disposal: Special help is available for the disposal of Agricultural Chemicals. The product label will give general advice regarding disposal of small quantities, and how to cleanse containers. However, for help with the collection of unwanted rural chemicals, contact ChemClear 1800 008 182 <http://www.chemclear.com.au/> and for help with the disposal of empty drums, contact DrumMuster <http://www.drummuster.com.au/> where you will find contact details for your area.

Section 14 - Transport Information

Dangerous according to Australian Dangerous Goods (ADG) Code, IATA and IMDG/IMSBC criteria.

UN Number: 2761, ORGANOCHLORINE PESTICIDE, SOLID, TOXIC, N.O.S.

Hazchem Code: 2Z

Special Provisions: 61, 274

Limited quantities: ADG 7 specifies a Limited Quantity value of 5 kg for this class of product.

Dangerous Goods Class: Class 6.1: Toxic Substances.

Packing Group: III

Packing Instruction: P002, IBC08

Class 6 Toxic Substances shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 3 (Flammable Liquids where the Flammable Liquid is nitromethane), 5.1 (Oxidising Agents where the Toxic Substances are Fire Risk Substances), 5.2 (Organic Peroxides where the Toxic Substances are Fire

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Risk Substances), 8 (Corrosive Substances where the Toxic Substances are cyanides and the Corrosives are acids), Foodstuffs and foodstuff empties. They may however be loaded in the same vehicle or packed in the same freight container with Classes, 2.1 (Flammable Gases), 2.2 (Non-Flammable, Non-Toxic Gases), 2.3 (Toxic Gases), 3 (Flammable liquids, except where the flammable liquid is nitromethane), 4.1 (Flammable Solids), 4.2 (Spontaneously Combustible Substances), 4.3 (Dangerous When Wet Substances), 5.1 (Oxidising Agents except where the Toxic Substances are Fire Risk Substances), 5.2 (Organic Peroxides except where the Toxic Substances are Fire Risk Substances), 7 (Radioactive Substances), 8 (Corrosive Substances except where the Toxic Substances are cyanides and the Corrosives are acids), 9 (Miscellaneous Dangerous Goods)

Section 15 - Regulatory Information

APVMA Approval no.: 89048

Poison schedule (SUSMP): Schedule 6

AICIS: All the constituents of this material are either listed on the Australian Inventory of Industrial Chemicals (AIIC), not required due the nature of the chemical as they are excluded as an industrial chemical or have been assessed under the Industrial Chemicals Act 1989 as amended.

Section 16 - Other Information

This SDS contains only safety-related information. For other data see product literature.

Issue Date: August 2025

Reason(s) for issue: Five-year update and updated to latest GHS requirements.

Key abbreviations or acronyms:

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

AICIS – Australian Industrial Chemicals Introduction Scheme (formerly NICNAS)

AIIC - Australian Inventory of Industrial Chemicals

APVMA – Agricultural Pesticides and Veterinary Medicines Australia

CAS number - Chemical Abstracts Service Registry Number

GHS - Globally Harmonised System of Classification and Labelling of Chemicals (7th revised edition) 2017

Hazchem Code - Emergency action code of numbers and letters that provide information to emergency services especially firefighters.

IARC - International Agency for Research on Cancer

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (June 2023)

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

TGA – Therapeutic Goods Australia

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.

UN Number - United Nations Number

WHS – Workplace Health and Safety

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD STATEMENT: INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

This SDS is prepared in accord with the SWA document "Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice" ((June 2023) and GHS Revision 7
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