

SAFETY DATA SHEET

SECTION 1

IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **Apparent Captan 900 WG Fungicide**

Other Names: Captan. Group M4 Fungicide. Phthalimide group of fungicides.
Use: Agricultural fungicide for the control of certain diseases in crops.
Company: Apparent Pty Ltd.
Address: Suite G.08, 762 Toorak Rd, Glen Iris, Vic 3146.
PO Box 3092, Cotham PO, Kew, Vic 3101
ACN/ABN: 143 724 136
Telephone Number: 03 9822 1321
Email: enquiries@apparentaq.com.au
Emergency Contact: 0411 227 338

SECTION 2

HAZARDS IDENTIFICATION

**Classified as hazardous according to criteria of Safe Work Australia.
Not classified as a Dangerous Good according to the ADG Code.**

Not subjected to the ADG code when transported in Australia by Road or Rail in packages 500 kg (L) or less; or in IBC's (refer to SP AU01). However, if transported by Air or Sea, this provision does not apply. Then the product is classed as Dangerous (Class 9 Environmentally Hazardous) by IATA and IMDG respectively. See Section 14 of this SDS for details.

Globally Harmonised System (GHS) classification of the substance/mixture:

Acute Toxicity – Inhalation: Hazard Category 3.
Eye Damage/Irritation: Hazard Category 1.
Sensitization – Skin: Hazard Category 1, 1A, 1B.
Germ Cell Mutagenicity – Hazard Category 1.
Carcinogenicity: Hazard Category 2.
Hazardous to the aquatic environment – Short term (Acute) Hazard – Hazard category 1.

Signal Word: DANGER.

Hazard Statements:

H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H331 Toxic if inhaled.
H340 May cause genetic defects.
H351 Suspected of causing cancer.
H400 Very toxic to aquatic life.

Precautionary statements:

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all Safety precautions have been read and understood.
P261 Avoid breathing dust, mist, vapours or spray.
P271 Use only in outdoors or in a well ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P273 Avoid release to the environment.
P281 Use personal protective equipment as required.

SECTION 2 HAZARDS IDENTIFICATION (Continued)**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.
P308 + P313	If exposed or concerned: Get medical advice/attention.
P311	Call a POISON CENTRE or doctor/physician.
P321	Specific treatment see Safety Directions on the label.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P308 + P313	IF exposed or concerned: Get medical advice/ attention:
P391	Collect Spillage.

Storage and Disposal:

P403 + P233	Store in a well-ventilated place. keep container tightly closed.
P405	Store locked up.

Disposal:

P501	Dispose of contents/container in accordance with national regulations.
------	--

Pictograms:**SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS****Ingredients:**

CHEMICAL	CAS NUMBER	PROPORTION
Captan	133-06-2	900 g/kg
Other ingredients determined not to be hazardous		Balance

SECTION 4 FIRST AID MEASURES**FIRST AID**

Ingestion:	If swallowed do NOT induce vomiting. If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 131 126. Rinse mouth and give plenty of water to drink. Make every effort to prevent vomit from entering the lungs by careful placement of the patient.
Eye contact:	If in eyes, immediately brush granules away and flush with copious amounts of water until product is removed. Seek medical advice immediately. If irritation persists, seek medical advice.
Skin contact:	If on skin gently brush granules away. Wash skin with soap and water to remove product. Remove contaminated clothing. If irritation occurs and persists see a doctor. Launder contaminated clothing before re-use.
Inhalation:	Remove to fresh air and observe until recovered. If effects persist, seek medical advice.
Advice to Doctor:	No specific antidote. Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

Specific Hazard: There is a very low risk of an explosion from this product if commercial quantities are involved in a fire.

Extinguishing media: Not combustible, use extinguishing media suited to burning material. If waterfog or fine water spray is used, ensure all runoff is contained. Contain all runoff.

SECTION 5 FIRE FIGHTING MEASURES (Continued)

Hazards from combustion products: Product will decompose when burnt and will emit toxic and noxious fumes. Firefighters to wear self-contained breathing apparatus and suitable protective clothing if risk to of exposure to vapour or smoke.

Precautions for fire-fighters and special protective equipment: Isolate fire area. Evacuate downwind residents. Wear full protective clothing and self contained breathing apparatus. Do not breathe smoke or vapours generated.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Emergency procedures: Wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), elbow-length PVC/nitrile gloves and face-shield or goggles. Harmful if inhaled or swallowed. Will damage the eyes. May irritate the skin. May irritate the nose and throat. In the case of spillage, stop leak if safe to do so, and contain spill. Prevent spillage entering drains or watercourses. Contain and absorb spilled material with absorbent material such as sand, clay, cat litter or material such as vermiculite. Collect recoverable product for use as labelled on the product. Vacuum, shovel or pump contaminated spilled material into an approved container and dispose of waste as per the requirements of Local or State Waste Management Authorities. Keep out animals and unprotected persons. Launder protective clothing before storage or re-use.

Material and methods for containment and cleanup procedures: To clean spill area, tools and equipment, wash with a solution of soap, water and acetic acid/vinegar. Follow this with a neutralisation step of washing the area with a bleach or caustic soda ash solution. Finally, wash with a strong soap and water solution. Absorb, as above, any excess liquid and add both solutions to the drums of waste already collected.

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

SECTION 7 HANDLING AND STORAGE

Precautions for Safe Handling: Avoid generating dust. Ensure containers are kept closed until using product. Harmful if inhaled or swallowed. Will damage the eyes. May irritate the skin. May irritate the nose and throat. Avoid contact with eyes and skin. If product or spray in eyes, wash it out immediately with water. Do not inhale dust or spray mist. When opening the container, mixing and loading and preparing spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), elbow-length PVC/nitrile gloves and face-shield or goggles. When using the prepared spray wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length rubber gloves. Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing. Wash hands after use. After each day's use wash gloves, goggles and contaminated clothing.

Conditions for Safe Storage: Store in the closed, original container in a well ventilated area away from children, animals, food, feedstuffs, seed and fertilisers. Do not store for prolonged periods in direct sunlight. Ideally, the product should be stored below 30°C.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

Exposure guidelines have been established for the active ingredient in this product by Safe Work Australia. The exposure standard for captan contains a carcinogen, sensitiser and skin notice.

Atmospheric Contaminant	Exposure Standard (TWA)	STEL (mg/m ³)
Captan (Sk Sen*)	0.5 mg/m ³	-

TWA = Time-weight Average STEL = Short term Exposure Limit

- * The 'Sk' notation refers to the potential for dermal absorption of the material including mucous membranes and the eyes by contact with vapours or direct skin contact.
- * The 'Sen' notation refers to the potential of the substance can cause a specific immune response in some people. An affected individual may subsequently react to minute levels of that substance.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)

CARCINOGEN CATEGORY NOTICE: Category 2 - Probable human carcinogen for which there is sufficient evidence to provide a strong presumption that human exposure might result in the development of cancer.

Biological Limit Values:

No biological limit allocated.

Engineering Controls:

Use in well ventilated area only. Use local exhaust at all process locations where spray may be emitted. Ventilate all transport vehicles prior to unloading. Keep containers closed when not in use

Personal Protective Equipment (PPE):

General: When opening the container, mixing and loading and preparing spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), elbow-length PVC/nitrile gloves and face-shield or goggles. When using the prepared spray wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length rubber gloves. Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing. Wash hands after use. After each day's use wash gloves, goggles and contaminated clothing. Harmful if inhaled or swallowed. Will damage the eyes. May irritate the skin

Personal Hygiene: Clean water should be available for washing in case of eye or skin contamination. Wash skin before eating, drinking or smoking. Shower at the end of the workday.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Grey brown granules.
Odour:	Feint characteristic odour.
Boiling point:	No data.
Freezing point:	No data.
Specific Gravity:	No data.
Solubility in Water:	Product disperses in water.
pH:	No data.
Flammability:	No data.
Corrosive hazard:	Not corrosive.
Flashpoint (°C):	Not available.
Poisons Schedule:	This product is a Schedule 6 (S6) poison.
Formulation Type:	Water dispersible Granule.

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: Product is considered stable in ambient conditions for a period of at least 2 years after manufacture.

Conditions to avoid: Do not store for prolonged periods in direct sunlight.

Incompatible materials: Strong oxidising agents and strong alkalis.

Hazardous decomposition products: On burning will emit toxic fumes of carbon monoxide, carbon dioxide, hydrogen chloride, oxides of nitrogen and possibly thiophosgene.

Hazardous reactions: Will not polymerise.

SECTION 11 TOXICOLOGICAL INFORMATION

No specific data is available for this product as no toxicity tests have been conducted on this product. Information presented is our best judgement based on similar products and/or individual components. As with all products for which limited data is available, caution must be exercised through the use of protective equipment and handling procedures to minimise exposure.

SECTION 11 TOXICOLOGICAL INFORMATION (Continued)**Potential Health Effects:****ACUTE EFFECTS**

Swallowed: The acute oral toxicity LD₅₀ (rat) > 5000 mg/kg. Possible symptoms include nausea, vomiting and gastrointestinal discomfort and diarrhoea.

Eye: Irritating to the eye. Symptoms include burning, itching, and tearing.

Skin: The acute dermal toxicity LD₅₀ (rabbit) > 4000 mg/kg. Avoid skin contact. May cause skin irritation. Prolonged contact with the concentrate may result in absorption of Captan in harmful amounts. May cause sensitisation by prolonged skin contact.

Inhaled: This product is toxic if inhaled. Acute inhalation LC₅₀ = 0.6 mg/L/4 hour. Breathing in high concentrations of dusts or aerosols of this material may cause headache, nausea, dizziness and weakness.

Long Term Exposure:

Chronic toxicity: Safe Work Australia has classified this product as a carcinogen of Category 2 - Probable human carcinogen for which there is sufficient evidence to provide a strong presumption that human exposure might result in the development of cancer.

Reproductive effects: Pregnant mice exposed by inhalation to high doses of Captan for 4 hours a day during days 6 to 15 of gestation showed significant mortality or weight loss. Foetal mortality accompanied these effects. Mice fed 50 mg/kg/day over three generations reproduced normally. Captan is unlikely to cause reproductive effects in humans at usual levels of exposure.

Teratogenic effects: Teratogenicity studies with rats, rabbits, hamsters, and dogs have given both negative and positive results. However, the weight of evidence suggests that Captan does not produce birth defects.

Mutagenic effects: Although Captan was mutagenic in some laboratory tests on isolated tissue cultures, the majority of evidence indicates that Captan is nonmutagenic.

SECTION 12**ECOLOGICAL INFORMATION**

Environmental Toxicology: Captan is highly toxic to fish. Toxicity to fish: Bluegill sunfish LC₅₀ (96 hr) 0.075 mg/L, Brook trout LC₅₀ (96 hr) 0.034 mg/L. Moderately toxic to aquatic invertebrates: *Daphnia magna* EC₅₀ (48 hr) 7 - 10 mg/L. Low toxicity to bees LD₅₀ = 91 µg/bee. Low toxicity to birds - mallard duck and pheasants LD₅₀ > 5000 mg/kg and Bobwhite quail LD₅₀ = 2000 - 4000 mg/kg.

Environmental Fate: Captan has a low persistence in soil, with a half-life of 1 to 10 days. Captan is rapidly degraded in near neutral water with half-lives of 23 to 54 hours - The effective residual life in water is 2 weeks. Captan has a low to moderate tendency to accumulate in living tissue - estimates of the bioconcentration factor range from 10 to 1000.

SECTION 13**DISPOSAL CONSIDERATIONS**

Spills and Disposal: Keep out animals and unprotected persons. Keep material out of streams and sewers. Dispose of drummed wastes, including decontamination solution, in accordance with the requirements of Local or State Waste Management Authorities. In rural areas contact ChemClear <http://www.chemclear.com.au> for help with collection of unwanted rural chemicals.

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

Disposal of empty containers: Triple-rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.

SECTION 13 DISPOSAL CONSIDERATIONS (Continued)

drumMUSTER is the national program for the collection and recycling of empty, cleaned, non returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMuster symbol, triple rinse the container, ring your local Council, and offer the container for collection in the program.

SECTION 14 TRANSPORT INFORMATION

Road & Rail Transport: is not classified as a Dangerous Goods under the Australian Code for the Transport of Dangerous Goods by Road and Rail in containers less than 3000 kilograms. (See special provision AU01). Bulk shipments should use UN 3077, as per below.

Marine and Air Transport: Apparent Captan 900 WG Fungicide is a Marine Pollutant according to International Maritime Dangerous Goods (IMDG) Code and the International Air Transport Association (IATA). If transporting by sea or air the following Dangerous Goods Classification applies:- UN 3077, Class 9 (Miscellaneous Dangerous Goods), Packing Group III, Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Contains 90% Captan).

SECTION 15 REGULATORY INFORMATION

Under the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP), this product is a Schedule 6 poison.

This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 68838.

This product is classified as a Hazardous Substance under the criteria of Safe Work Australia. Xn: Harmful, Xi: Irritant.

This product is not classified as a Dangerous Good according to the ADG Code for in packages 500 kg (L) or less; or in IBC's (refer to SP AU01). However, if transported by Air or Sea, this provision does not apply.

Requirements concerning special training:

Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.

SECTION 16 OTHER INFORMATION

Issue Date: 30 May 2019. Valid for 5 years till 30 May 2024. (5 year update).

Key to abbreviations and acronyms used in this SDS:

ADG Code: Australian Dangerous Goods Code (for the transport of dangerous goods by Road and Rail).

Ataxia: Inability to control the coordinate movements of the muscles.

Carcinogen: An agent which is responsible for the formation of a cancer.

Endocrine: Relating to or denoting glands which secrete hormones or other products directly into the blood.

Genotoxic: Capable of causing damage to genetic material, such as DNA.

Mutagenic: Capable of inducing a genetic mutation in an organism.

Neurotoxicity: An adverse change in the structure or function of the nervous system.

LD₅₀: Median Lethal Dose A statistically derived single dose of a substance that can be expected to cause death in 50% of dosed animals.

Oedema: Accumulation of fluid in tissues.

PPE: Personal protective equipment.

Teratogen: An agent capable of causing abnormalities in a developing foetus.

TWA: The Time Weighted Average airborne concentration over an eight-hour working day, for a five day working week over an entire working life.

Safe Work Australia: Formally known as Australian Safety & Compensation Council (ASCC) which was formally known as the National Occupational Health & Safety Commission (NOHSC).

SECTION 16 OTHER INFORMATION (Continued)

References:

1. "Hazardous Chemicals Information System". Safe Work Australia HCIS website. (2019).
2. "Classifying Hazardous Substances" Safe Work Australia. August 2018.
3. Globally Harmonized System of Classification and Labelling of Chemicals (GHS). United Nations, 2009.

This SDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

End SDS