

## 1 Identification

**Product Name:** TITAN CHLOROTHALONIL 900 WG FUNGICIDE

**Other Means of Identification:** Mixture

**Recommended Use of the Chemical and Restriction on Use:** Agricultural fungicide

**Details of Manufacturer or Importer:**

Titan Ag Pty Ltd  
15/16 Princes Street  
Newport NSW 2106

**Phone Number:** 02 9999 6655

**Emergency telephone number:** 02 9999 6655

## 2 Hazard(s) Identification

**Hazardous Nature:**

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)



skull and crossbones

Acute Toxicity (Inhalation) 1      H330 Fatal if inhaled.



health hazard

Carcinogenicity 2      H351 Suspected of causing cancer.



corrosion

Serious Eye Damage/Irritation 1      H318 Causes serious eye damage.



environment

Aquatic Acute 1      H400 Very toxic to aquatic life.

Aquatic Chronic 1      H410 Very toxic to aquatic life with long lasting effects.



Skin Sensitisation 1      H317 May cause an allergic skin reaction.

STOT SE 3      H335 May cause respiratory irritation.

**Signal Word** Danger

**Hazard Statements**

H330 Fatal if inhaled.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

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H351 Suspected of causing cancer.  
 H335 May cause respiratory irritation.  
 H410 Very toxic to aquatic life with long lasting effects.

**Precautionary Statements**

P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P260 Do not breathe dust/fume/gas/mist/vapours/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/eye protection/face protection.  
 P284 [In case of inadequate ventilation] wear respiratory protection.  
 P302+P352 IF ON SKIN: Wash with plenty of water.  
 P304+P340 IF INHALED: Remove person to fresh air and keep 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.  
 P310 Immediately call a POISON CENTER/doctor.  
 P308+P313 IF exposed or concerned: Get medical advice/attention.  
 P320 Specific treatment is urgent (see on this label).  
 P362+P364 Take off contaminated clothing and wash it before reuse.  
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P391 Collect spillage.  
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
 P405 Store locked up.  
 P501 Dispose of contents/container in accordance with local/regional/national regulations.

### 3 Composition and Information on Ingredients

**Chemical Characterization: Mixtures****Description:** Mixture of substances listed below with nonhazardous additions.**Hazardous Components:**

CAS: 1897-45-6	Chlorothalonil (ISO)	90%

### 4 First Aid Measures

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

**Skin Contact:**

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap for at least 5 minutes. Seek medical attention if symptoms occur.

**Eye Contact:**

In case of eye contact, hold eyelids open and rinse with water for at least 20 minutes. Seek medical attention if symptoms occur.

**Ingestion:**

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give a glass of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

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**Symptoms Caused by Exposure:**

Inhalation: Fatal if inhaled. May cause respiratory irritation.

Skin Contact: May cause an allergic skin reaction, inflammation and irritation.

Eye Contact: Causes serious eye damage, blurred vision and redness. Prolonged contact may cause permanent damage.

Ingestion: May cause gastrointestinal irritation and redness to the mouth and throat.

**5 Fire Fighting Measures****Suitable Extinguishing Media:** Water fog, foam, dry chemical or carbon dioxide.**Specific Hazards Arising from the Chemical:**

Hazardous combustion products include oxides of carbon and nitrogen, other nitrogen compounds, hydrogen cyanide, hydrogen chloride and other chlorine compounds.

Product may form explosive dust clouds in air.

Containers close to fire should be removed if safe to do so.

**Special Protective Equipment and Precautions for Fire Fighters:**

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

**6 Accidental Release Measures****Personal Precautions, Protective Equipment and Emergency Procedures:**

Wear approved dust/particulate filter respirator and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe dust. Ensure adequate ventilation. Avoid generating dust.

**Environmental Precautions:**

In the event of a major spill, prevent spillage from entering drains or water courses.

**Methods and Materials for Containment and Cleaning Up:**

Stop leak if safe to do so and sweep granules into a pile and shovel into drums for subsequent disposal. Avoid generating dust. Consider vacuuming if appropriate. Provide adequate ventilation.

**7 Handling and Storage****Precautions for Safe Handling:**

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of dust.

Food, beverages and tobacco products should not be stored or consumed where this material is in use.

Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

**Conditions for Safe Storage:**

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Protect from heat, sparks, open flames, hot surfaces and direct sunlight. Keep away from strong oxidising agents, strong acids and strong bases.

**8 Exposure Controls and Personal Protection****Exposure Standards:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**Engineering Controls:** Ensure adequate ventilation of the working area.**Respiratory Protection:**

Where an inhalation risk exists, wear a Class P1 (particulate) respirator. At high dust levels, wear a powered air purifying respirator (PAPR) with Class P3 (Particulate) filter or an air-line respirator or a full-face Class P3 (particulate) respirator. See Australian/New Zealand Standards AS/NZS 1715 and 1716 for more information.

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**Skin Protection:**

Rubber or 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 AS/NZS 4501 for more information.

**Eye and Face Protection:**

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

### 9 Physical and Chemical Properties

**Appearance:**

<b>Form:</b>	Solid
<b>Colour:</b>	Light brown
<b>Odour:</b>	Mild but pungent
<b>Odour Threshold:</b>	No information available
<b>pH-Value:</b>	6 - 8
<b>Melting point/freezing point:</b>	~252 °C
<b>Initial Boiling Point/Boiling Range:</b>	>350 °C
<b>Flash Point:</b>	Not applicable
<b>Flammability:</b>	Product is not flammable.
<b>Auto-ignition Temperature:</b>	Not applicable
<b>Decomposition Temperature:</b>	No information available
<b>Explosion Limits:</b>	
<b>Lower:</b>	Not applicable
<b>Upper:</b>	Not applicable
<b>Vapour Pressure:</b>	Negligible at normal ambient temperatures.
<b>Relative Density:</b>	~1.8
<b>Vapour Density:</b>	Not applicable
<b>Evaporation Rate:</b>	Not applicable
<b>Solubility in Water:</b>	Dispersible
<b>Partition Coefficient (n-octanol/water):</b>	No information available
<b>Viscosity:</b>	Not applicable

### 10 Stability and Reactivity

**Possibility of Hazardous Reactions:** Hazardous polymerisation will not occur.

**Chemical Stability:** Stable at ambient temperature and under normal conditions of use.

**Conditions to Avoid:** Heat, sparks, open flames, hot surfaces and direct sunlight.

**Incompatible Materials:** Strong oxidising agents, strong acids and strong bases.

**Hazardous Decomposition Products:**

Oxides of carbon and nitrogen, other nitrogen compounds, hydrogen cyanide, hydrogen chloride and other chlorine compounds.

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## 11 Toxicological Information

**Toxicity:****LD<sub>50</sub>/LC<sub>50</sub> Values Relevant for Classification:****CAS: 1897-45-6 Chlorothalonil (ISO)**

Oral	LD <sub>50</sub>	>6,000 mg/kg (mice) >10,000 mg/kg (rat)
Dermal	LD <sub>50</sub>	>10,000 mg/kg (rabbit)

**Acute Health Effects****Inhalation:** Fatal if inhaled. May cause respiratory irritation.**Skin:** May cause an allergic skin reaction, inflammation and irritation.**Eye:**

Causes serious eye damage, blurred vision and redness. Prolonged contact may cause permanent damage.

**Ingestion:** May cause gastrointestinal irritation and redness to the mouth and throat.**Skin Corrosion / Irritation:** Based on classification principles, the classification criteria are not met.**Serious Eye Damage / Irritation:** Causes serious eye damage.**Respiratory or Skin Sensitisation:** May cause an allergic skin reaction.**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.**Carcinogenicity:**

Suspected of causing cancer.

Chlorothalonil is classified by IARC as Group 2B - Possibly carcinogenic to humans.

**Reproductive Toxicity:** Based on classification principles, the classification criteria are not met.**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.

**Aspiration Hazard:** Based on classification principles, the classification criteria are not met.**Chronic Health Effects:** Prolonged contact may cause dermatitis and kidney damage.**Existing Conditions Aggravated by Exposure:** No information available**Additional toxicological information:**

Very high concentrations may cause incoordination, rapid breathing, nose bleeds, vomiting, hyperactivity and possibly death.

The Australian Acceptable Daily Intake (ADI) for chlorothalonil for a human is 0.01 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 1.5 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species.

(Ref: Australian Pesticides and Veterinary Medicines Authority, 'Acceptable Daily Intakes for Agricultural and Veterinary Chemicals', 2019).

## 12 Ecological Information

**Ecotoxicity:** Chlorothalonil is nontoxic to birds and bees.**Aquatic toxicity:** Very Toxic to aquatic life with long lasting effects.**Persistence and Degradability:** Chlorothalonil is moderately persistent. Half-life in soil = 1 - 3 months.

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**Bioaccumulative Potential:** Chlorothalonil has a low bioaccumulation factor.**Mobility in Soil:** No further relevant information available.**Other adverse effects:** No further relevant information available.

### 13 Disposal Considerations

**Disposal Methods and Containers:** Dispose according to applicable local and state government regulations.**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

### 14 Transport Information

**UN Number** Not regulated**Proper Shipping Name** Not regulated**Dangerous Goods Class** Not regulated**Packing Group:** Not regulated

### 15 Regulatory Information

**Australian Inventory of Chemical Substances:**

CAS: 1897-45-6 | Chlorothalonil (ISO)

**Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:**

Poisons Schedule: 6

### 16 Other Information

**Date of Preparation or Last Revision:** 27.02.2019**Prepared by:** MSDS.COM.AU Pty Ltd[www.msds.com.au](http://www.msds.com.au)**Abbreviations and acronyms:**

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC<sub>50</sub>: Lethal concentration, 50 percentLD<sub>50</sub>: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Acute Toxicity (Inhalation) 1: Acute toxicity – Category 1

Serious Eye Damage/Irritation 1: Serious eye damage/eye irritation – Category 1

Skin Sensitisation 1: Skin sensitisation, Hazard Category 1

Carcinogenicity 2: Carcinogenicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). Category 1

**Disclaimer**

This SDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - February 2016"

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