

# SAFETY DATA SHEET

## SECTION 1

## IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **Apparent Triadimefon 500 WG Fungicide**

**Other Names:** Triadimefon, Group 3 Fungicide.  
**Use:** An agricultural fungicide to control fungal diseases on wheat.  
**Company:** Apparent Pty Ltd  
**Address:** Suite G.08, 762 Toorak Rd, Hawthorn East, Vic. 3123.  
PO Box 3092, Cotham PO, Kew, Vic 3101  
**ACN/ABN:** 143 724 136  
**Telephone Number:** 03 9822 13216  
**Fax Number:** 03 9817 7845  
**Emergency Contact:** 0411 227 338  
**Email:** [wardell@bigpond.net.au](mailto:wardell@bigpond.net.au)

## 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.**

### GHS Classification:

Acute Toxicity – Oral: Category 4.  
Sensitization –Skin: Category 1, 1A, 1B.

**GHS Signal word:** WARNING.

### Hazard statements:

H302 Harmful if swallowed.  
H317 May cause an allergic skin reaction.

### Precautionary Statements:

#### Prevention:

P261 Avoid breathing mists, vapours or spray.  
P264 Wash hands, arms and face thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

#### Response:

P301+P312: IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.  
P321 Specific treatment see Safety Directions on product label.  
P363 Wash contaminated clothing before reuse.

#### Disposal

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

**Pictogram:**



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

<b>CHEMICAL</b>	<b>CAS NUMBER</b>	<b>PROPORTION</b>
Triadimefon	43121-43-3	500 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. Irritation is unlikely. However if irritation occurs and persists for more than a few minutes, 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 seek medical advice. 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:** Not flammable. There is little risk of an explosion from this product if commercial quantities are involved in a fire, however if scattered, this product may form explosive dust clouds in air.

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

**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****ACCIDENTIAL RELEASE MEASURES**

**Emergence procedures / Material and methods for containment and cleanup procedures:** Wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow length chemical resistant gloves and a disposable dust mask. In the case of spillage, stop leak if safe to do so, and contain spill. Contain and absorb spilled material with absorbent material such as sand, clay, cat litter or material such as vermiculite. Vacuum, shovel or pump spilled material into an approved container and dispose of waste as indicated in section 13 or according to the Australian Standard 2507 - Storage and Handling of Pesticides. Keep out animals and unprotected persons.

After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. 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.

**SECTION 7****HANDLING AND STORAGE**

**Precautions for Safe Handling:** Poisonous if swallowed. May irritate the eyes and skin. DO NOT inhale dust. When preparing product for use, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow length chemical resistant gloves and a disposable dust mask. After use and before eating, drinking or smoking wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves 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 not been established for this product by Safe Work Australia.

**Biological Limit Values:**

No biological limit allocated.

**Engineering controls:**

Use in ventilated areas. Keep containers closed when not in use.

**Personal Protective equipment (PPE):**

General: When preparing product for use, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow length chemical resistant gloves and a disposable dust mask. After use and before eating, drinking or smoking wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

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**

<b>Appearance:</b>	White coloured granulated solid.
<b>Odour:</b>	Mild chemical odour.
<b>Boiling point:</b>	No data – solid at room temperature.
<b>Freezing point:</b>	No data – solid at room temperature.
<b>Bulk Density:</b>	No data.
<b>Solubility in Water:</b>	Disperses in water.
<b>pH:</b>	No data available.
<b>Flammability:</b>	Not flammable.
<b>Corrosive hazard:</b>	Not corrosive.
<b>Flashpoint (°C):</b>	Not flammable.
<b>Poisons Schedule:</b>	This product is a schedule 6 (S6) poison.
<b>Formulation Type:</b>	Water Dispersible Granule (WG).

**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:** When burnt in a fire will emit toxic and noxious fumes.

**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.

**Potential Health Effects:****ACUTE EFFECTS**

**Swallowed:** Available data shows that this product is harmful, but symptoms are not available. However, significant oral exposure is considered to be unlikely. This product is unlikely to cause any irritation problems in the short or long term.

**Eye:** This product may cause eye irritation, but it's likely to be mild and cause transient irritation. Symptoms may include stinging and reddening of eyes and watering.

**Skin:** May cause mild irritation of the skin. LD<sub>50</sub> > 2000 mg/kg (rabbit). Classified as a potential sensitiser by skin contact.

**Inhaled:** Data indicates that the product is harmful by inhalation, but is an unlikely route of exposure. Unlikely to cause anything more than mild transient discomfort.

**Long Term Exposure:**

**Chronic toxicity:** In chronic feeding studies in the mouse, rat, and dog, triadimefon produced a dose-related increase in liver weights accompanied by elevation of serum hepatic alkaline phosphatase and transaminase activities. Increased liver weights may be seen as an adaptation to toxic stress, rather than a toxic endpoint related to exposure.

**Reproductive effects:** Female rats fed up to 90 mg/kg/day of Triadimefon over three generations showed a number of adverse effects. However, the evidence suggests it is unlikely that Triadimefon will cause reproductive toxicity in humans under normal circumstances.

**Teratogenic effects:** The teratogenic potential of Triadimefon is relatively low and unlikely that Triadimefon will cause birth defects in humans under normal circumstances.

**Mutagenic effects:** Six separate studies indicate that Triadimefon compound is nonmutagenic. Several other tests were inconclusive. It is unlikely that the compound poses a significant mutagenic risk.

**Carcinogenic effects:** In a 2-year dietary study with mice, the highest dose tested did not produce significant increases in tumour incidence. Due to high mortality, the reliability of this data is suspect. Another 2-year dietary study in mice showed increased liver cell hypertrophy (which may be related to tumour formation) at doses of greater than 36 mg/kg/day in males and 6 mg/kg/day for females. Increased liver cell adenoma was detected at all levels, but carcinoma was not detected at any level in this study. Based on this evidence, no conclusion can be drawn about the overall carcinogenicity of Triadimefon.

**Organ toxicity:** Triadimefon has been associated with changes in the liver, decreased kidney weights, and altered urinary bladder structure in laboratory animals exposed to 18 to 60 mg/kg/day. There is evidence that acute effects on the central nervous system may also occur.

**Fate in humans and animals:** After oral administration of a single dose of Triadimefon, most of the compound was eliminated unchanged in the urine and faeces within 2 to 3 days. Some breakdown of a small amount of the compound occurred in the liver. The compound has a very short residence time in the blood stream, about 2½ hours.

**SECTION 12****ECOLOGICAL INFORMATION**

**Environmental Toxicology:** Triadimefon is slightly toxic to fish with LC<sub>50</sub> = 14 mg/L for rainbow trout (96 hr) and LC<sub>50</sub> = 10 to 50 mg/L for Goldfish (96 hr). Low toxicity to birds with LD<sub>50</sub> > 4000 mg/kg for mallard ducks, 2000 mg/kg for Japanese quail and 1000 mg/kg for canaries. Low toxicity to bees.

**Environmental Fate:**

Triadimefon is stable in water at most pH levels. Low to moderate persistent in soil a half life of 6 days in loamy soils, but 14 to 60 days in other soil types. May have the potential to leach to groundwater. In plants triadimefon breaks down to triadimenol which has similar toxicity to triadimefon.

**SECTION 13****DISPOSAL CONSIDERATIONS**

**Spills and Disposal:** Persons involved in cleanup require adequate skin protection - see section 8. Spills and Disposal: 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.

**Disposal of empty containers:** Triple or preferably pressure 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 bury empty containers in a local authority landfill. 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.

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:** This product is not classified as a Dangerous Good under the Australian Code for the Transport of Dangerous Goods by Road and Rail.

**Marine and Air Transport:** his product is not classified as a Dangerous Good according to International Maritime Dangerous Goods (IMDG) Code and the International Air transport Association (IATA).

**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. 68392.

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.

*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: 1 July 2014. Valid for 5 years. (First issue).

Key to abbreviations and acronyms used in this MSDS:

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.

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

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

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

OCS: Office of Chemical Safety.

**SECTION 16 OTHER INFORMATION (Continued)**

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).

**References**

1. "Search Hazardous Substances". Safe Work Australia website. (2014).
2. "Approved Criteria for Classifying Hazardous Substances" 3rd Ed. NOHSC Australia. [NOHSC:1008 (2004)]. October 2004.
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