

# SAFETY DATA SHEET

## SECTION 1

## IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **Apparent Thidiazuron Cotton Defoliant**

**Other Names:** Thidiazuron, Cotton Defoliant.  
**Use:** For the defoliation of cotton prior to harvest.  
**Company:** Apparent Pty Ltd  
**Address:** Suite G.08, 762 Toorak Road, Hawthorn East, Vic. 3123.  
PO Box 3092, Cotham PO, Kew, Vic 3101  
**ACN/ABN:** 143 724 136  
**Telephone Number:** 03 9822 1321  
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**Emergency Contact:** 0411 227 338  
**Email:** [wardell@bigpond.net.au](mailto:wardell@bigpond.net.au)

## SECTION 2

## HAZARDS IDENTIFICATION

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

## SECTION 3

## COMPOSITION/INFORMATION ON INGREDIENTS

### Ingredients:

<i>CHEMICAL</i>	<i>CAS NUMBER</i>	<i>PROPORTION</i>
Thidiazuron	51707-55-2	500 g/L
Other ingredients (including water) determined not to be hazardous		Balance

## SECTION 4

## FIRST AID MEASURES

### FIRST AID

**Ingestion:** If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 131 126. Wash mouth with water and give water to drink.

**Eye contact:** If in eyes, hold eyes open and flood with clean water until chemical is removed. Ensure irrigation under eyelids by occasionally lifting them. Do not try to remove contact lenses unless trained. If irritation persists, seek medical advice.

**Skin contact:** Wash affected skin with soap and water. Remove contaminated clothing. If skin irritation persists, re-wash area and seek medical advice. Launder contaminated clothing before re-use.

**Inhalation:** Remove to fresh air and observe until recovered. If effects persist, seek medical advice. Not expected to be a source of over-exposure.

**Advice to Doctor:** Treat symptomatically.

## SECTION 5

## FIRE FIGHTING MEASURES

**Specific Hazard:** Generally considered a low risk due to the water content, but once the water has evaporated the product is combustible.

**Extinguishing media:** Not flammable. No risk of explosion if involved in a fire. Extinguish fire using media suited to burning material. If containers are ruptured contain all runoff.

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**SECTION 5 FIRE FIGHTING MEASURES (Continued)**

**Hazards from combustion products:** Product is likely to decompose after heating to dryness and continued strong heating and will emit toxic fumes.

**Precautions for fire-fighters and special protective equipment:** Isolate fire area. Evacuate downwind residents. Firefighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or smoke. Do not breathe smoke or vapours generated.

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**SECTION 6 ACCIDENTAL RELEASE MEASURES**

**Emergency procedures / Material and methods for containment and cleanup procedures:**

**Accidental release:** In the event of a major spill, prevent spillage from entering drains or water courses. For major spills, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length PVC gloves. In the case of spillage, stop leak if safe to do so, and contain spill. Contain spill and sweep up and shovel or collect recoverable material into labelled containers for use, recycling or dispose as waste as indicated in section 13 or according to the Australian Standard 2507 - Storage and Handling of Pesticides. To decontaminate spill area, tools and equipment, wash with detergent and water and add the solution to the drums of wastes already collected and label contents. 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. Thoroughly launder protective clothing before storage or re-use.

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**SECTION 7 HANDLING AND STORAGE**

**Precautions for Safe Handling:** No smoking, eating or drinking should be allowed where material is used or stored. May irritate the eyes. Avoid contact with eyes. When opening the container and preparing spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length PVC gloves. After each day's use, wash gloves and contaminated clothing. Wash hands after use.

**Conditions for Safe Storage:** Not classified as a Dangerous Good. 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.

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**SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure Guidelines:**

No exposure limits have been assigned by Safe Work Australia to the ingredients in this product.

**Biological Limit Values:**

No biological limit allocated.

**Engineering controls:**

Keep containers closed when not in use. No special engineering controls are required, however make sure that the work environment remains clean and that vapours are minimised.

**Personal Protective equipment (PPE):**

When opening the container and preparing spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length PVC gloves. After each day's use, wash gloves and contaminated clothing. Wash hands after use.

**Personal Hygiene:** May irritate the eyes. Avoid contact with eyes. 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.

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**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Beige Liquid.  
**Odour:** Negligible odour.  
**Boiling point:** No data available.  
**Freezing point:** No data available.

**SECTION 9**      **PHYSICAL AND CHEMICAL PROPERTIES (Continued)**

<b>Specific Gravity:</b>	Approximately 1.1.
<b>Solubility in Water:</b>	Forms a suspension in water.
<b>pH:</b>	Approximately 7 - 8.
<b>Flammability:</b>	Not flammable.
<b>Flashpoint (°C):</b>	Not flammable.
<b>Poisons Schedule:</b>	This product is not a scheduled poison.
<b>Formulation type:</b>	Suspension Concentrate (SC).

**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:** Avoid strong acids, bases and strong oxidizing agents.

**Hazardous decomposition products:** Product is likely to decompose after heating to dryness and continued strong heating and will emit toxic fumes.

**Hazardous reactions:** Polymerisation will not occur.

**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:** Low acute toxicity. Direct ingestion of large quantities may cause nausea and vomiting. Acute Oral LD<sub>50</sub> > 4000 mg/kg.

**Eye:** May irritate the eyes.

**Skin:** Prolonged and repeated contact may cause slight irritation. Prolonged skin contact is unlikely to result in absorption of harmful amounts. Acute dermal LD<sub>50</sub> > 4,000 mg/kg.

**Inhaled:** No adverse effects are anticipated from single exposure to vapour. Mist may cause irritation of upper respiratory tract (nose and throat).

**Long Term Exposure:**

**Chronic toxicity:** In chronic toxicity studies in rats and mice, thidiazuron showed no toxic effects. In a chronic dog study, toxic haemolytic anemia associated with compensatory haemopoiesis was noted in the high dose animals. Thidiazuron was not carcinogenic or mutagenic and did not cause reproductive effects in animal studies.

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

**Environmental Toxicology:** No data is available on this product. Based largely or completely on information for the active ingredient. The active ingredient is considered to have very low toxicity to aquatic organisms, birds and bees. LC<sub>50</sub> (96 hr) Rainbow trout > 19 mg/L; LC<sub>50</sub> (96 hr) Bluegill sunfish = 32 mg/L. 48 hour EC<sub>50</sub> (Daphnia) > 10 mg/L. Acute oral toxicity LD<sub>50</sub> (Japanese quail) > 3160 mg/kg. 14 day LC<sub>50</sub> (earthworms) > 1400 mg/kg.

**Environmental Fate:** No data is available on this product. Based largely or completely on the active ingredient Log P<sub>ow</sub> is 1.77. Risk of bioaccumulation in an aquatic species is low. Thidiazuron is strongly adsorbed by soil, with half-lives in soil of 28 to 144 days in aerobic soil and 28 days in anaerobic soils.

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

**Spills and Disposal:** Persons involved in cleanup require adequate skin and eye protection -see section 8. In case of spillage, contain and absorb spilled material with absorbent material such as clay, sand or cat litter and dispose of waste as indicated below or in accordance to the Australian Standard 2507- Storage and Handling of Pesticides. Keep out animals and unprotected persons. Keep material out of streams and sewers. Vacuum, shovel or pump waste into an approved drum. To decontaminate spill area, tools and equipment, wash with a suitable solution (i.e. organic solvent, detergent, bleach or caustic) and add the solution to the drums of wastes already collected and label contents.

Dispose of drummed wastes, including decontamination solution in accordance with the requirements of Local or State Waste Management Authorities..

**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 no landfill is available, bury the containers below 500 mm 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. Empty containers and product should not be burnt.

**SECTION 14****TRANSPORT INFORMATION**

**Transport:** This product is not classified as a Dangerous Good. No special storage or transport requirements necessary. 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 not a scheduled poison.

This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 69192.

This product is not classified as a Hazardous Substance under the criteria of Safe Work Australia.

This product is not classified as a Dangerous Good according to the ADG Code (7<sup>th</sup> Ed).

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

**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: 24 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).

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

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

HSIS: Hazardous Substances information System.

Lacrimation: The production, secretion, and shedding of tears.

Lavage: A general term referring to cleaning or rinsing.

Mutagen: An agent capable of producing a mutation.

NOHSC: National Occupational Health and Safety Commission.

OCS: Office of Chemical Safety.

Pneumonitis: A general term that refers to inflammation of lung tissue.

PPE: Personal protective equipment.

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

**SECTION 16 OTHER INFORMATION (Continued)**

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". HSIS. 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*