MATERIAL SAFETY DATA SHEET

STATEMENT OF HAZARDOUS NATURE:

Hazardous according to the criteria of NOHSC

COMPANY DETAILS:

Syngenta Crop Protection Pty Limited ABN 33 002 933 717 Level 1, 2-4 Lyon Park Road NORTH RYDE, NSW 2113 Telephone No.: (02) 8876 8444 24 Hours Emergency No.: 1 800 033 111

IDENTIFICATION

PRODUCT NAME: TILT[®] 250 EC Systemic Fungicide

Formulation type: Active Ingredient: Product Code No.: Chemical type: UN Number (ADG): emulsifiable concentrate propiconazole A-6097/810C triazole none allocated

Dangerous Goods Class/and Subsidiary Risk (ADG):none allocatedHazchem Code:none allocatedPacking Groupnone allocatedPoisons Schedule:6

USE: Fungicide for the control of certain fungal disease of wheat, barley, stone fruit, bananas, peppermint, spearmint, perennial ryegrass, pineapples, poppies, boronia and peanuts.

PHYSICAL DESCRIPTION/PROPERTIES

Appearance: Odour: Specific gravity (H ₂ O=1)	Clear yellowish liquid Non-specific 0.99 (20°C)	Behaviour in water: Flash Point: Flammability:	Emulsifiable >61°C (closed cup) Non-flammable
OTHER PROPERTIES Combustibility: Viscosity:	C1 - combustible Not available	Volatility: Corrosiveness:	Not available Non-corrosive
INGREDIENTS - propiconazole (technical grade) to give propiconazole aromatic petroleum hydrocarbon liquid mixture alkylbenzene sulphonate fatty alcohol ethoxylate vegetable oil ethoxylate		CAS No. 60207-90-1 64742-94-5	Content (%w/v) >25 25 60 <10 <10 <10

HEALTH HAZARD INFORMATION

HEALTH EFFECTS

ACUTE

Toxicity - This product is slightly hazardous (WHO Hazard Class III)

Swallowed:	SLIGHT TOXICITY Tests on rats indicate a slight toxicity following single doses of undiluted product. (LD ₅₀ = 2105 mg/kg)
Dermal absorption:	SLIGHT TOXICITY Tests on rats indicate a slight toxicity following skin contact with undiluted product. (LD ₅₀ >2500 mg/kg, active ingredient)
Inhaled:	SLIGHT TOXICITY Tests on rats indicate a slight toxicity following inhalation of undiluted product. $(LC_{50} (4h) > 1.0 mg/L$, highest attainable concentration)

 Irritation

 Eye: (rabbit)
 SLIGHT-IRRITANT

 Skin: (human experience)
 SLIGHT-IRRITANT

Sensitisation

Skin: **Propiconazole technical** did not induce a sensitising reaction in guinea pigs. The sensitising potential of the **hydrocarbon liquid** is not known.

Poisoning Symptoms

No cases of human poisoning are on record. The poisoning symptoms observed for laboratory animals were non-specific.

CHRONIC (Active Ingredient)

Propiconazole technical has been extensively tested on laboratory mammals and in test-tube systems. Chronic administration of large doses of **propiconazole technical** was associated with an increased liver tumour incidence in mice but not in rats. This proved to be related to a promotive effect of **propiconazole technical** on proliferative changes genetically pre-existing in mice and therefore has no relevance to humans. No evidence of mutagenic, teratogenic or reproductive effects was obtained.

The **hydrocarbon liquid** may cause narcosis and central nervous system depression following prolonged over-exposure.

FIRST AID

If poisoning occurs by any exposure route contact a doctor or Poisons Information Centre. Phone 131 126.

Swallowed:	DO NOT induce vomiting. Give a glass of water. Get to a doctor.		
Eye:	Flush with large quantities of clean tap water for at least 15 minutes.		
Skin:	Remove contaminated clothing and wash affected areas thoroughly with soap and water.		
Inhaled:	Move affected person to fresh air and keep at rest until recovered. If not breathing, give		
	artifical respiration and get to a doctor.		

ADVICE TO DOCTOR

No specific antidote exists. Treat symptomatically.

PRECAUTIONS FOR USE

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

EXPOSURE STANDARDS

No exposure standards have been established for the components of this product.

Exposure Potential - Swallowing is unlikely under normal conditions of usage. Significant skin uptake does not occur. Inhalation is a possible route of exposure. This product is diluted with water prior to use as a spray. This diluted form is less toxic by all routes of exposure.

<u>Re-entry Period</u> - Do not enter treated areas without protective clothing until the spray has dried.

ENGINEERING CONTROLS

No special requirements. Product is used outdoors.

PERSONAL PROTECTION

Avoid contact with eyes and skin. Do not inhale spray mist. If product gets on skin immediately wash affected area with soap and water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

FLAMMABILITY

This product is NON-FLAMMABLE. Product is combustible.

SAFE HANDLING INFORMATION

STORAGE AND TRANSPORT

Store in tightly sealed original containers in a dry secure place away from fertilisers, seed, feed and food. Store out of direct sunlight. Keep out of reach of children, unauthorised persons and animals.

Transport Classification – Sea (IMDG):

UN No.:	3082	Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS
Class:	9		SUBSTANCE, LIQUID, N.O.S.
Packing Group:	Ш	Additional Information:	PROPICONAZOLE 25%, MARINE POLLUTANT

SPILLS AND DISPOSAL

In case of spillage it is important to take all steps necessary to:

- Avoid eye and skin contact.
- Avoid contamination of waterways.

Procedure for spill:

- (1) Keep all bystanders away.
- (2) Wear full length clothing and PVC gloves.
- (3) Reposition any leaking containers so as to minimise further leakage.
- (4) Dam and absorb spill with an absorbent material (e.g. sand or soil).
- (5) Shovel the absorbed spill into drums.
- (6) Disposal of the absorbed material will depend upon the extent of the spill.
 - For quantities up to 50 L of product bury in a secure landfill site.
 - For quantities greater than 50 L seek advice from the manufacturer (use emergency contact number below) before attempting disposal. Contain in a secure location until disposal method is established.
- (7) Decontaminate the spill area with detergent and water and rinse with the smallest volume of water practicable

Dispose of empty, used containers by:

- (a) Triple rinsing or preferably pressure rinsing containers with water. Add the rinsings to the spray tank. DO NOT dispose of undiluted chemicals on site.
- (b) If recycling, replace cap and return clean containers to recycler or designated collection point.
- (c) 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. Empty containers and product should not be burnt.

Disposal instructions for 50 L Bulk containers:

- (a) Empty contents fully into application equipment.
- (b) Close all valves and return containers to point of sale for refilling or storage.

FIRE/EXPLOSION HAZARD

This product is non-flammable and non-explosive. Product is combustible. Extinguish warehouse and factory fires using fine-water spray or foam. During a fire this product may release smoke and hazardous decomposition products. When fighting a major fire wear an air-supplied respirator.

OTHER INFORMATION

Propiconazole technical is toxic to fish, aquatic invertebrates and green algae; and practically non-toxic to birds and bees.

Acute toxicity studies with catfish, rainbow trout, carp, bluegill, golden orfe and the marine spot gave LC_{50} values from 2.2 to 6.8 mg/L. The EC₅₀ for *Daphnia magna* and the Mysid shrimp were 4.8 mg/L and 0.5 mg/L, respectively. Toxicity studies on freshwater algae and two diatom species showed EC₅₀ values ranging from 0.02 mg/L to 13.6 mg/L.

Note: This product is a registered agricultural chemical and must therefore be used in accordance with the container label directions. A comprehensive package of toxicological and environmental data for the active ingredients of this product has been submitted to the Federal health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

 CONTACT POINT:
 Regulatory Affairs Manager - Crop Protection - (02) 8876 8444

 24 HOURS EMERGENCY CONTACT:
 1 800 033 111

This Material Safety Data Sheet 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 MSDS 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.

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