

## SAFETY DATA SHEET

### Section 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

<b>Product Name:</b>	<b>COGITO™ Fungicide</b>
<b>Other Names:</b>	<b>Proper shipping name:</b> Environmentally Hazardous Substance, Liquid, N.O.S. (Propiconazole), followed by <b>Applicable only for marine and air transport</b>
	<b>Product code:</b> A9232D
<b>Recommended Use:</b>	Fungicide for the control of fungal diseases of cereals, peanuts and ryegrass
<b>Company Details:</b>	<b>Syngenta Crop Protection Pty Limited</b> ABN 33 002 933 717
<b>Address:</b>	<b>Level 1, 2-4 Lyonpark Road</b> <b>MACQUARIE PARK NSW 2113</b> <b>AUSTRALIA</b>
<b>Telephone Number:</b>	<b>(02) 8876 8444</b>
<b>Emergency Telephone Number:</b>	<b>24 hours - 1800 033 111</b>

### Section 2: HAZARDS IDENTIFICATION

<b>Hazard Classification:</b>	Classified as a hazardous chemical according to the Australian criteria for the classification of chemicals
<b>Risk Phrases:</b>	R63: Possible risk of harm to the unborn child
<b>Safety Phrases:</b>	—

### Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE		
<b>Chemical Identity of Pure Substance:</b>	Propiconazole	Tebuconazole
<b>Synonym:</b>	CGA 64250	
<b>CAS Number:</b>	60207-90-1	107534-96-3

MIXTURE		
Chemical Identity of Ingredients	CAS No	Proportion (% w/v)
Propiconazole	60207-90-1	25
Tebuconazole	107534-96-3	25
N-octyl-2-pyrrolidone	2687-94-7	40 – 50
Other ingredients determined not to be hazardous	-	to 100

## Section 4: FIRST AID MEASURES

<b>Description of Necessary First Aid Measures:</b>	<p>In case of poisoning by any exposure route get to a doctor or hospital quickly. Phone Poisons Information Centre on 131 126. Have the product label or SDS with you when calling or going for treatment.</p> <p><b>Ingestion:</b> If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.</p> <p><b>Eye contact:</b> Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.</p> <p><b>Skin contact:</b> Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.</p> <p><b>Inhalation:</b> Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest.</p>
<b>Poisoning Symptoms:</b>	Poisoning symptoms in laboratory animals were non-specific
<b>Medical Advice:</b>	There is no specific antidote available. Treat symptomatically.

## Section 5: FIRE FIGHTING MEASURES

<b>Suitable Extinguishing Media:</b>	<p><i>Small fires</i>          Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Do not use a solid water stream as it may scatter and spread fire.</p> <p><i>Large fires</i>          Use alcohol-resistant foam or water spray. Do not use a solid water stream as it may scatter and spread fire.</p>
<b>Hazards from Combustion Products:</b>	<p>As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see Section 10). Exposure to decomposition products may be a hazard to health. Flashback possible over considerable distance.</p> <p>DO NOT allow run-off from fire fighting to enter drains or water courses</p>
<b>Special Protective Precautions and Equipment for Fire Fighters:</b>	<p>Wear full protective clothing and self-contained breathing apparatus.</p> <p>Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.</p>

## Section 6: ACCIDENTAL RELEASE MEASURES

<b>Emergency Procedures:</b>	In case of spillage it is important to take all steps necessary to <ul style="list-style-type: none"><li>• Avoid eye and skin contact</li><li>• Avoid contamination of waterways</li></ul>
<b>Methods and Materials for Containment and Clean Up:</b>	<b>Procedure for spill</b> <ol style="list-style-type: none"><li>(1) Keep all bystanders away</li><li>(2) Wear full length clothing and PVC gloves</li><li>(3) Reposition any leaking containers so as to minimise further leakage</li><li>(4) Dam and absorb spill with an absorbent material (eg sand or soil)</li><li>(5) Shovel the absorbed spill into drums</li><li>(6) Disposal of the absorbed material will depend upon the extent of the spill<ul style="list-style-type: none"><li>• For quantities up to 50 L of product bury in a secure landfill site</li><li>• 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</li></ul></li><li>(7) Decontaminate spill area with detergent and water and rinse with the smallest volume of water practicable</li></ol>

## Section 7: HANDLING AND STORAGE

<b>Precautions for Safe Handling:</b>	Will irritate eyes. May irritate skin. Avoid contact with eyes and skin. When opening the container and using the product wear: <ul style="list-style-type: none"><li>• cotton overalls buttoned to the neck and wrist (or equivalent clothing)</li><li>• elbow length chemical resistant gloves</li><li>• goggles</li></ul> If applying by hand wear: <ul style="list-style-type: none"><li>• cotton overalls, over normal clothing, buttoned to the neck and wrist</li><li>• elbow length chemical resistant gloves</li><li>• goggles.</li></ul> If product in eyes wash it out immediately with waterWash hands after use. After each day's use wash gloves, goggles and contaminated clothing.
<b>Conditions for Safe Storage:</b>	Store in the closed, original container in a cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight.

## Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

### ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

<b>National Exposure Standards:</b>	No exposure standard allocated		
	<i>Component</i>	<i>Exposure limit</i>	<i>Value type</i>
<b>Syngenta Exposure Standards:</b>	Propiconazole	8 mg/m <sup>3</sup>	8h TWA
<b>Biological Limit Values:</b>	No biological limits allocated		
<b>Engineering Controls:</b>	No special requirements. Product is used outdoors. .		
<b>Personal Protective Equipment:</b>	<p>Will irritate eyes. May irritate skin. Avoid contact with eyes and skin. When opening the container and using the product wear:</p> <ul style="list-style-type: none"> <li>• cotton overalls buttoned to the neck and wrist (or equivalent clothing)</li> <li>• elbow length chemical resistant gloves</li> <li>• goggles</li> </ul> <p>If applying by hand wear:</p> <ul style="list-style-type: none"> <li>• cotton overalls, over normal clothing, buttoned to the neck and wrist</li> <li>• elbow length chemical resistant gloves</li> <li>• goggles.</li> </ul> <p>If product in eyes wash it out immediately with water Wash hands after use. After each day's use wash gloves, goggles and contaminated clothing.</p>		

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Yellow to brown liquid	<b>Boiling Point:</b>	Not available
<b>Odour:</b>		<b>Freezing Point:</b>	Not available
<b>pH:</b>	6 – 10 at 1! w/v	<b>Solubility:</b>	Miscible
<b>Viscosity, dynamic</b>	54.0 mPa at 40°C 193 mPa at 20°C	<b>Density:</b>	1064 g/cm <sup>3</sup> at 20°C

<b>Flash Point:</b>	164°C at 102.4 kpa (Pensky-Martens)	<b>Explosive Properties:</b>	Not explosive
<b>Upper and Lower Flammable (Explosive) Limits in Air:</b>	Not available	<b>Oxidising Properties:</b>	Not oxidising
<b>Auto -Ignition Temperature:</b>	340°C	<b>Combustibility:</b>	Combustible C2
		<b>Corrosiveness:</b>	Not corrosive

## Section 10: STABILITY AND REACTIVITY

<b>Chemical Stability:</b>	Stable under normal conditions. Hazardous polymerization does not occur.
<b>Conditions to Avoid:</b>	None known
<b>Incompatible Materials:</b>	None known
<b>Hazardous Decomposition Products:</b>	Combustion or thermal decomposition will evolve toxic and irritant vapours.
<b>Hazardous Reactions:</b>	None known

## Section 11: TOXICOLOGICAL INFORMATION

Health Effects from Likely Routes of Exposure:	
<b>Acute:</b>	<p><b>Oral toxicity:</b>      <b>LOW TOXICITY</b> Tests on rats indicate this product has a low toxicity following single doses of undiluted product. (LD<sub>50</sub> &gt; 2000 mg/kg)</p> <p><b>Dermal toxicity:</b>    <b>LOW TOXICITY</b> Tests on rabbits indicate this product has a low toxicity following skin contact with undiluted product. (LD<sub>50</sub> &gt; 2000 mg/kg)</p> <p><b>Inhalation:</b>            <b>LOW TOXICITY</b> Tests on rats indicate this product has a low toxicity due to inhalation of undiluted product. LC<sub>50</sub> (4h) &gt; 5.0 mg/L air</p> <p><b>Skin irritation:</b>        <b>MILD IRRITANT</b></p> <p><b>Eye irritation:</b>        <b>NON IRRITANT</b></p> <p><b>Sensitisation:</b>        <b>NOT A SENSITISER</b></p>
<b>Chronic:</b>	<p><b>Propiconazole technical</b> has been extensively tested on laboratory mammals and in test-tube systems. No evidence was obtained of mutagenic, carcinogenic teratogenic, neurotoxic or reproductive effects.</p> <p><b>Tebuconazole technical</b> has been extensively tested on laboratory mammals and in test-tube systems. No evidence was obtained of mutagenic, carcinogenic or teratogenic neurotoxic effects. Experiments have shown reproductive toxicity effects on laboratory animals.</p>

## Section 12: ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	<p><i>Toxicity to fish:</i>                    <b>Moderately toxic to fish</b> <i>Oncorhynchus mykiss</i> (rainbow trout): LC<sub>50</sub> = 8.49 mg/L, 96 h</p> <p><i>Toxicity to daphnia and other aquatic invertebrates:</i>                    <b>Slightly toxic to aquatic invertebrates</b> <i>Daphnia magna</i> (Water flea): EC<sub>50</sub> = 13 mg/L, 48 h</p> <p><i>Toxicity to algae:</i>                    <b>Slightly toxic to algae</b> <i>Pseudokirchneriella subcapitata</i> (green algae): E<sub>r</sub>C<sub>50</sub> = 13 mg/L, 72 h</p>
<b>Persistence and Degradability:</b>	<p>Propiconazole is stable in water Propiconazole and tebuconazole are not persistent in soil</p>
<b>Mobility</b>	<p>Propiconazole has low to medium mobility in soil.</p>
<b>Environmental Fate (Exposure):</b>	<p>Propiconazole degrades primarily by microbial action and hydroxylation and is ultimately mineralised</p>
<b>Bioaccumulative Potential:</b>	<p>Propiconazole has low to medium potential to bioaccumulate. Tebuconazole does not bioaccumulate.</p>

### Section 13: DISPOSAL CONSIDERATIONS

<b>Disposal Methods and Containers:</b>	<p><b>Non-returnable containers:</b> 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. Empty containers and product should not be burnt.</p> <p><b>Returnable containers:</b> Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.</p>
<b>Special Precautions for Landfill or Incineration:</b>	Not applicable

### Section 14: TRANSPORT INFORMATION

<b>LAND TRANSPORT</b> ADG			
Not a dangerous good in Australia			
<b>UN Number:</b>	None allocated	<b>Packing Group:</b>	None allocated
<b>UN Proper Shipping Name:</b>	None allocated	<b>Special Precautions for User:</b>	None allocated
<b>Class:</b>	None allocated	<b>Hazchem Code:</b>	None allocated
<b>Subsidiary Risk:</b>	None allocated		

<b>SEA TRANSPORT</b> IMDG			
<b>UN Number:</b>	3082	<b>Subsidiary Risk:</b>	None allocated
<b>UN Proper Shipping Name:</b>	Environmentally Hazardous Substance, Liquid, N.O.S. (Propiconazole)	<b>Packing Group:</b>	9
<b>Class:</b>	III	<b>Marine Pollutant:</b>	Yes

<b>AIR TRANSPORT</b> IATA - DGR			
<b>UN Number:</b>	3082	<b>Subsidiary Risk:</b>	None allocated
<b>UN Proper Shipping Name:</b>	Environmentally Hazardous Substance, Liquid, N.O.S. (Propiconazole)	<b>Packing Group:</b>	9
<b>Class:</b>	III		

## Section 15: REGULATORY INFORMATION

APVMA Product Number: 66677

Poisons Schedule (SUSDP): 6

## Section 16: OTHER INFORMATION

**Date of preparation or last revision:** March 2013

**Source of Data:** The information provided in this SDS is sourced from Syngenta internal studies which have been conducted according to Regulatory requirements including OECD and CIPAC Guidelines and EC Directives. A comprehensive package of toxicological and environmental data for the active ingredients of this product has been submitted to the government health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

**Note: This product is a registered agricultural chemical and must, therefore, be used in accordance with the container label directions**

**CONTACT POINT:** Regulatory Affairs Manager, Syngenta Crop Protection Pty Limited  
(02) 8876 8444

**24 HOURS EMERGENCY CONTACT: 1800 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 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.

### DISCLAIMER

This product complies with the specifications in its statutory registration. Implied terms and warranties are excluded. Syngenta's liability for breach of the express or any non-excludable implied warranty is limited to product replacement or purchase price refund. The purchaser must determine suitability for intended purpose and take all proper precautions in the handling, storage and use of the product including those on the label and/or safety data sheet failing which Syngenta shall have no liability.