


SAFETY DATA SHEET

Section 1: Identification: Product identifier and chemical identity

Product Identifier:	INSTRATA Turf Fungicide
Other Means of Identification:	Proper shipping name: Environmentally Hazardous Substance, Liquid, N.O.S. (chlorothalonil, fludioxonil) Applicable only for marine and air transport Product code: A14036B
Recommended Use:	Fungicide for the control of various diseases of turf
Details of manufacturer or importer	Syngenta Australia Pty Ltd ABN 33 002 933 717
Address:	Level 1, 2-4 Lyonpark Road MACQUARIE PARK NSW 2113 AUSTRALIA
Website:	syngenta.com.au
Phone Number:	(02) 8876 8444
Emergency Phone Number:	24 hours - 1800 033 111

Section 2: Hazards identification

Classification of the Hazardous Chemical:	Carcinogenicity - Category 2 Acute toxicity – inhalation – Category 2 Serious eye damage – Category 1 Skin sensitisation – Category 1
Signal Word:	WARNING
Hazard Statement(s):	H303 May be harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H351 Suspected of causing cancer.
Precautionary Statement(s):	P102 Keep out of reach of children. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P302 + P352 IF ON SKIN: Wash with plenty of soap and water..
Hazard Symbols:	

Section 3: Composition and information on ingredients

SUBSTANCE			
Chemical Identity of Pure Substance:	Chlorothalonil	Propiconazole	Fludioxonil
Synonym:	R 44686	CGA 64250	CGA 173506
CAS Number:	1897-45-6	60207-90-1	131341-86-1

MIXTURE		
Chemical Identity of Ingredients:	CAS No	Proportion (% w/v)
Chlorothalonil	1897-45-6	29.9
Propiconazole	60207-90-1	4.7
Fludioxonil	131341-86-1	1.2
Propane-1,2-diol	57-55-6	1 - 5
tristyrylphenol polyethoxyester phosphate	90093-37-1	1 – 5
Non-hazardous ingredients	-	to 100

Section 4: First aid measures

Description of Necessary First Aid Measures:	<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>Ingestion: If swallowed, seek medical advice immediately and show the container or label. DO NOT induce vomiting.</p> <p>Eye contact: 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>Skin contact: Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a doctor. Wash contaminated clothing before re-use.</p> <p>Inhalation: Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a doctor or Poisons Information Centre immediately</p>
Symptoms Caused by Exposure:	Poisoning symptoms in laboratory animals were non-specific
Medical Attention and Special Treatment:	There is no specific antidote available. Treat symptomatically.

Section 5: Fire fighting measures

Suitable Extinguishing Equipment:	<p>Small fires: Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.</p> <p>Large fires: Use alcohol-resistant foam or water spray DO NOT use a solid water stream as it may scatter and spread fire</p>
Specific Hazards Arising from the Chemical:	<p>As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).</p> <p>Exposure to decomposition products may be a hazard to health.</p>
Special Protective Equipment and Precautions for Fire Fighters:	<p>Wear full protective clothing and self-contained breathing apparatus. 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

<p>Personal Precautions, Protective Equipment and Emergency Procedures:</p>	<p>In case of spillage it is important to take all steps necessary to</p> <ul style="list-style-type: none"> • Avoid eye and skin contact • Avoid contamination of waterways <p>Wear full length clothing and PVC gloves Keep all bystanders away</p>
<p>Environmental precautions:</p>	<p>Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.</p>
<p>Methods and Materials for Containment and Clean Up:</p>	<p>Procedure for spill</p> <ol style="list-style-type: none"> (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 (eg sand or soil) (5) Shovel the absorbed spill into drums (6) Disposal of the absorbed material will depend upon the extent of the spill <ul style="list-style-type: none"> • 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 spill area with detergent and water and rinse with the smallest volume of water practicable.

Section 7: Handling and storage

<p>Precautions for Safe Handling:</p>	<p>Harmful if inhaled or swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. Poisonous if inhaled. DO NOT inhale vapour or spray mist. Repeated exposure may cause allergic disorders.</p> <p>When opening, preparing spray and using the prepared spray wear:</p> <ul style="list-style-type: none"> • cotton overalls over normal clothing, buttoned to the neck and wrist • a washable hat • elbow-length chemical resistant gloves • face shield or goggles, disposable face mask covering mouth and nose. <p>If applying by hand, wear</p> <ul style="list-style-type: none"> • full face respirator with organic vapour/gas cartridge or canister. <p>If clothing becomes contaminated with product or wet with spray, remove clothing immediately. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. Wash hands after use. 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, face shield or goggles and contaminated clothing.</p>
<p>Conditions for Safe Storage, Including any Incompatibilities:</p>	<p>Store in the closed, original container in a cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight.</p>

Section 8: Exposure controls and personal protection

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

	Component	Exposure limit	Value type
National Exposure Standards:	Propylene glycol	10 mg/m ³ (particulates)	8 h TWA
		150 ppm	
		474 mg/m ³ (Total (vapour and particulates))	
Syngenta Exposure Standards:	Chlorothalonil	0.1 mg/m ³	8 h TWA
	Propiconazole	8 mg/m ³	8 h TWA
	Fludioxonil	10 mg/m ³	8 h TWA
	Propane-1,2-diol	10 mg/m ³ (particulates)	8 h TWA
		150 ppm	
	474 mg/m ³ (Total (vapour and particulates))		
Biological Limit Values:	No biological limits allocated		
Engineering Controls:	No special requirements. Product is used outdoors.		
Personal Protective Equipment:	<p>Harmful if inhaled or swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. Poisonous if inhaled. DO NOT inhale vapour or spray mist. Repeated exposure may cause allergic disorders.</p> <p>When opening, preparing spray and using the prepared spray wear:</p> <ul style="list-style-type: none"> • cotton overalls over normal clothing, buttoned to the neck and wrist • a washable hat • elbow-length chemical resistant gloves • face shield or goggles, disposable face mask covering mouth and nose. <p>If applying by hand, wear</p> <ul style="list-style-type: none"> • full face respirator with organic vapour/gas cartridge or canister. <p>If clothing becomes contaminated with product or wet with spray, remove clothing immediately. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. Wash hands after use. 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, face shield or goggles and contaminated clothing.</p>		

Section 9: Physical and chemical properties

Appearance:	Grey liquid	Boiling Point/Range:	No data available
Odour:	Aromatic	Freezing/Melting Point:	No data available
pH:	5.5 at 25°C, 1% w/v	Solubility:	Suspensible in water
Vapour Pressure:	Not available	Density:	1.2 g/mL at 20°C
Vapour Density:	Not available		

Flash Point:	>100°C at 741-749 mmHg Pensky-Martens cc	Explosive Properties:	Not explosive
Upper and Lower Flammable (Explosive) Limits in Air:	Not flammable	Oxidising Properties:	Not oxidising
Ignition Temperature:	>650°C	Combustibility:	Not applicable
		Corrosiveness:	No data available for metals, non corrosive to fluorinated and non fluorinated HDPE

Section 10: Stability and reactivity

Reactivity:	No information available
Chemical Stability:	Stable under standard conditions
Possibility of Hazardous Reactions:	None known. Hazardous polymerisation does not occur.
Conditions to Avoid:	No information available
Incompatible Materials:	No information available
Hazardous Decomposition Products:	Check global SDS. Usually a statement such as, Combustion or thermal decomposition will evolve toxic and irritant vapours.

Section 11: Toxicological information

Health Effects from Likely Routes of Exposure:		
Acute	Oral toxicity:	LOW TOXICITY Tests on rats indicate this product has a low toxicity following single doses of undiluted product LD ₅₀ = 5,000 mg/kg (female rat)
	Dermal toxicity:	LOW TOXICITY Tests on rats indicate this product has a low toxicity following skin contact with undiluted product LD ₅₀ = >5,000 mg/kg (rat)
	Inhalation:	TOXIC Tests on rats indicate this product is toxic due to inhalation of undiluted product LC ₅₀ = 0.52 -2.01 mg/L (rat, 4 hour)
	Skin irritation:	IRRITANT (rabbit)
	Eye irritation:	IRRITANT (rabbit)
	Sensitisation:	SENSITISER (guinea pig)
Chronic	<p>Chlorothalonil, propiconazole and fludioxonil have been extensively tested on laboratory animals and in test-tube systems. No evidence of mutagenic, neurotoxic, teratogenic or reproduction effects was obtained for these substances, nor was there any evidence of carcinogenic effects for fludioxonil.</p> <p>Chlorothalonil has shown an increase in kidney tumours in rats and mice via a non-gentoxic mode of action secondary to target organ toxicity when given at high doses. No adverse effects in humans are expected at levels below the occupational exposure limit and when the product is handled and used according to the label.</p> <p>Propiconazole was associated with an increased liver tumour incidence in mice but not in rats when given at large doses in chronic toxicity tests. This proved to be related to a</p>	

promotive effect of propiconazole on proliferative changes genetically pre-existing in mice and therefore has no relevance to humans. The **aromatic hydrocarbon mixture** may cause central nervous system depression and narcosis.

Section 12: Ecological information

Ecotoxicity	Toxicity to fish:	Highly toxic to fish <i>Oncorhynchus mykiss</i> (Rainbow Trout): LC ₅₀ = 0.155 mg/L, 96 h
	Toxicity to daphnia and other aquatic invertebrates:	Highly toxic to Daphnia <i>Daphnia magna</i> (Water Flea): EC ₅₀ = 0.45 mg/L, 48 h
	Toxicity to algae:	Moderately toxic to algae <i>Pseudokirchneriella subcapitata</i> (Green Algae): E _b C ₅₀ = 0.36 mg/L, 72 h E _r C ₅₀ = 2.05 mg/L, 72 h
	Toxicity to soil dwelling organisms:	No information available
Persistence and Degradability:	Chlorothalonil is not persistent in water Propiconazole is stable in water. Fludioxonil is stable in water.	
	Chlorothalonil is not persistent in soil. Propiconazole is not persistent in soil. Fludioxonil is not persistent in soil.	
Mobility in Soil:	Chlorothalonil has low to slight mobility in soil Propiconazole has low to medium mobility in soil. Fludioxonil is immobile in soil.	
Bioaccumulative Potential:	Chlorothalonil has low potential for bioaccumulation. Propiconazole has low to medium potential to bioaccumulate. Fludioxonil does not bioaccumulate	

Section 13: Disposal considerations

Disposal Methods:	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 deliver empty packaging for appropriate disposal to an approved waste management facility. 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.
Special Precautions for Incineration or Landfill:	Not applicable

Section 14: Transport information

LAND TRANSPORT ADG		Not a dangerous good in Australia	
UN Number:	None allocated	Packing Group:	None allocated
UN Proper Shipping Name:	None allocated	Special Precautions for User:	None allocated
Transport Hazard Class:	None allocated	Hazchem or Emergency Action Code:	None allocated
Subsidiary Risk:	None allocated		

SEA TRANSPORT IMDG			
UN Number:	3082	Subsidiary Risk:	None allocated
UN Proper Shipping Name:	Environmentally Hazardous Substance, Liquid, N.O.S. (Chlorothalonil, Propiconazole, Fludioxonil)	Packing Group:	III
Transport Hazard Class:	9	Environmental hazards for Transport Purposes:	Marine pollutant

AIR TRANSPORT IATA - DGR		Take details from global SDS	
UN Number:	3082	Subsidiary Risk:	None allocated
UN Proper Shipping Name:	Environmentally Hazardous Substance, Liquid, N.O.S. (Chlorothalonil, Propiconazole, Fludioxonil)	Packing Group:	III
Transport Hazard Class:	9		

APVMA Product Number:	64480
Poisons Schedule (SUSMP):	6

Date of preparation or last revision: November 2016

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 Australia Pty Ltd
(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.