

## SAFETY DATA SHEET

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

<b>Product Name:</b>	<b>VERGE 500 SC Fungicide</b>
<b>Other Names:</b>	<b>Proper shipping name:</b> Environmentally Hazardous Substance, Solid or Liquid, N.O.S. (Flutriafol) <b>Applicable only for marine and air transport</b>
<b>Recommended Use:</b>	Fungicide for control of certain fungal diseases on Wheat, Barley and Canola when mixed with fertiliser
<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>	R20/22 Harmful by inhalation and if swallowed
<b>Safety Phrases:</b>	—

### Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE		
<b>Chemical Identity of Pure Substance:</b>	Flutriafol	
<b>CAS Number:</b>	76674-21-0	

  

MIXTURE		
Chemical Identity of Ingredients	CAS No	Proportion (%w/v)
Flutriafol	76674-21-0	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> Do NOT induce vomiting. Rinse any residual product from mouth and lips. Give water to drink and seek medical help immediately.</p> <p><b>Eye contact:</b> Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses.</p> <p><b>Skin contact:</b> Take off all contaminated clothing. Wash thoroughly under running water using a mild soap. Seek medical advice if irritation, reddening and/or other damage occurs.</p> <p><b>Inhalation:</b> Move to fresh air. Keep patient warm and at rest. Remove victim from exposure - avoid becoming a casualty.</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>	Use dry chemical, carbon dioxide, foam or water fog.
<b>Hazards from Combustion Products:</b>	<p>During a fire, smoke may contain the original material in addition to products of varying composition that may be toxic and/or irritating.</p> <p>Product is non-combustible. If the water in the formulation is evaporated by prolonged heating, the residue will burn.</p>
<b>Special Protective Precautions and Equipment for Fire Fighters:</b>	In the event of fire, wear 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.

## 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>	<p><b>Procedure for spill</b></p> <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>	Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight.
<b>Conditions for Safe Storage:</b>	<p>Will irritate the eyes. May irritate the skin. Avoid contact with eyes and skin. When 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>• face shield or 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 and contaminated clothing.</p>

## Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

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

<b>National Exposure Standards:</b>	No exposure standard allocated. However, an exposure standard has been recommended by the supplier for flutriafol at 1.5 mg/m <sup>3</sup> (8 hr TWA)
<b>Biological Limit Values:</b>	No biological limits allocated
<b>Engineering Controls:</b>	Ensure adequate ventilation. Supplement natural ventilation if necessary.
<b>Personal Protective Equipment:</b>	<p>Will irritate the eyes. May irritate the skin. Avoid contact with eyes and skin. When 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>• face shield or 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 and contaminated clothing.</p>

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Viscous yellow liquid suspension	<b>Boiling Point/Range:</b>	Approx. 100°C
<b>Odour:</b>	Faint	<b>Freezing/Melting Point:</b>	<0 °C
<b>pH:</b>	Not available	<b>Specific Gravity:</b>	Approx 1.1
<b>Solubility:</b>	Fully miscible. Flutriafol will be suspended, not dissolved.	<b>Vapour Pressure:</b>	Not available

<b>Flash Point:</b>	Not available	<b>Combustibility:</b>	Non-combustible
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## Section 10: STABILITY AND REACTIVITY

<b>Chemical Stability:</b>	Product should be stable in storage for at least 3 years. Some settling might occur, and containers should be agitated at least once every 12 months to resuspend any sediment.
<b>Conditions to Avoid:</b>	Do not store outside the temperature range 5 to 25°C.
<b>Incompatible Materials:</b>	Strong acids, bases, or oxidising agents.
<b>Hazardous Decomposition Products:</b>	Carbon dioxide and monoxide, Nitrogen oxides, fluorides including hydrofluoric acid may be produced under certain conditions of combustion
<b>Hazardous Reactions:</b>	Not likely to polymerise

## Section 11: TOXICOLOGICAL INFORMATION

<b>Health Effects from Likely Routes of Exposure:</b>		
<b>Acute:</b>	<b>Oral toxicity:</b>	<b>HARMFUL</b> Tests on rats indicate this product is harmful following single doses of active ingredient. (LD <sub>50</sub> = 1200 – 1550 mg/kg males LD <sub>50</sub> = 1550 – 2000 mg/kg males)
	<b>Dermal toxicity:</b>	<b>LOW TOXICITY</b> Tests on rabbits indicate this product has a low toxicity following skin contact with unactive ingredient. (LD <sub>50</sub> > 2000 mg/kg)
	<b>Inhalation:</b>	<b>LOW TOXICITY</b> Tests on rats indicate this product is not harmful due to inhalation of active ingredient. LC <sub>50</sub> (4h) > 5 mg/L air)
	<b>Skin irritation:</b>	<b>NON IRRITANT</b>
	<b>Eye irritation:</b>	<b>MILD IRRITANT</b>
	<b>Sensitisation:</b>	<b>NOT A SENSITISER</b>
<b>Chronic:</b>	<b>Flutriafol technical</b> has been extensively tested on laboratory mammals and in test-tube systems. The liver was identified as the target organ. No evidence was obtained of mutagenic, carcinogenic, teratogenic or reproductive effects.	

## Section 12: ECOLOGICAL INFORMATION

The following information is based on test results obtained with the active ingredient.

<b>Ecotoxicity:</b>	<i>Toxicity to fish:</i>	<b>Slightly toxic to fish</b> <i>Oncorhynchus mykiss</i> (rainbow trout): LC <sub>50</sub> = 65 - 86 mg/L, 96 h
	<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> > 80 mg/L, 48 h
	<i>Toxicity to algae:</i>	<b>Moderately toxic to algae</b> <i>Selenastrum capricornutum</i> (green algae): IC <sub>50</sub> = 12 mg/L, 96 h <i>Scenedesmus subspicatus</i> (green algae): IC <sub>50</sub> = 2.0 – 2.6 mg/L, 72 h
	<i>Toxicity to soil dwelling organisms:</i>	<b>Practically non-toxic to earthworms</b> <i>Eisenia foetida</i> (earthworm): No effect found at 100 mg/m <sup>2</sup> in 180 day
<b>Persistence and Degradability:</b>	Flutriafol is not readily degradable. Degradation half-lives vary with circumstances, but are usually over 1 year in soil and water	
<b>Mobility:</b>	Flutriafol has moderate mobility in soil. Absorption depends on soil pH and organic matter content.	
<b>Bioaccumulative Potential:</b>	Flutriafol is not expected to bioaccumulate.	

## Section 13: DISPOSAL CONSIDERATIONS

<b>Disposal Methods and 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 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.
<b>Special Precautions for Landfill or Incineration:</b>	Not applicable

## Section 14: TRANSPORT INFORMATION

<b>LAND TRANSPORT ADG</b>	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		

SEA TRANSPORT 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. (Flutriafol)	<b>Packing Group:</b>	III
<b>Class:</b>	9	<b>Marine Pollutant:</b>	Marine Pollutant

AIR TRANSPORT 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. (Flutriafol)	<b>Packing Group:</b>	III
<b>Class:</b>	9		

### Section 15: REGULATORY INFORMATION

<b>APVMA Product Number:</b>	65591
<b>Poisons Schedule (SUSDP):</b>	S6

### Section 16: OTHER INFORMATION

<b>Date of preparation or last revision:</b> January 2011
<b>Source of Data:</b> 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.
<b>Note:</b> This product is a registered agricultural chemical and must, therefore, be used in accordance with the container label directions
<b>CONTACT POINT:</b> Regulatory Affairs Manager, Syngenta Crop Protection Pty Limited (02) 8876 8444 <b>24 HOURS EMERGENCY CONTACT: 1800 033 111</b>
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.

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