

## SAFETY DATA SHEET

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

<b>Product Name:</b>	<b>CADENCE® WG Herbicide</b>
<b>Other Names:</b>	<b>Product code:</b> A9781A
<b>Recommended Use:</b>	Herbicide for the control of certain broadleaf weeds in Winter Cereals, Pastures, Conservation Tillage, Sugarcane, Rice, Turf, Grain Sorghum and Non-Crop Areas
<b>Company Details:</b>	<b>Syngenta Australia Pty Ltd</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>	R22 Harmful if swallowed R41 Risk of serious eye damage
<b>Safety Phrases:</b>	—

### Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

<b>SUBSTANCE</b>	
<b>Chemical Identity of Pure Substance:</b>	Dicamba sodium
<b>Synonym:</b>	SAN 837 H
<b>CAS Number:</b>	1982-69-0

<b>MIXTURE</b>		
<b>Chemical Identity of Ingredients</b>	<b>CAS No</b>	<b>Proportion (% w/w)</b>
Dicamba sodium	1982-69-0	70
Silica	7631-86-9	20 - <30
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. Call a physician or Poison Information Centre immediately.</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>	As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see Section 10). Combustion or thermal decomposition will evolve toxic and irritant vapours. Exposure to decomposition products may be a hazard to health.
<b>Special Protective Precautions and Equipment for Fire Fighters:</b>	<p>Wear 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 goggles, half face-piece respirator with combined dust and vapour cartridge, full length clothing and PVC gloves</li><li>(3) Reposition any leaking containers so as to minimise further leakage</li><li>(3) <i>For a product spill:</i> Sweep spilt material into a pile. <i>For a prepared spray spill:</i> Dam and absorb spill with an absorbent material (eg sand or soil)</li><li>(5) Shovel 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 kg of product bury in a secure landfill site</li><li>• For quantities greater than 50 kg 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 the 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>	Corrosive, attacks the eyes. Will irritate the skin. Avoid contact with eyes and skin. When opening container and preparing spray wear: <ul style="list-style-type: none"><li>• cotton overalls buttoned to the neck and wrist</li><li>• a washable hat</li><li>• elbow-length PVC gloves</li><li>• goggles</li></ul> When using the prepared spray, wear: <ul style="list-style-type: none"><li>• cotton overalls buttoned to the neck and wrist</li><li>• a washable hat</li><li>• elbow-length PVC gloves</li></ul> If product in eyes, wash it out immediately with water. 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, goggles and contaminated clothing
<b>Conditions for Safe Storage:</b>	Store in the closed, original container in a dry, cool, well ventilated area out of direct sunlight

**Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

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

	<i>Component</i>	<i>Exposure limit</i>	<i>Value type</i>
<b>National Exposure Standards:</b>	Silica (respirable dust)	2 mg/m <sup>3</sup>	8h TWA
<b>Syngenta Exposure Standards:</b>	dicamba	10 mg/m <sup>3</sup>	8h TWA
<b>Biological Limit Values:</b>	No biological limit allocated		
<b>Engineering Controls:</b>	No special requirements. Product is used outdoors		
<b>Personal Protective Equipment:</b>	<p>Corrosive, attacks the eyes. Will irritate the skin. Avoid contact with eyes and skin. When opening container and preparing spray wear:</p> <ul style="list-style-type: none"> <li>• cotton overalls buttoned to the neck and wrist</li> <li>• a washable hat</li> <li>• elbow-length PVC gloves</li> <li>• goggles</li> </ul> <p>When using the prepared spray, wear:</p> <ul style="list-style-type: none"> <li>• cotton overalls buttoned to the neck and wrist</li> <li>• a washable hat</li> <li>• elbow-length PVC gloves</li> </ul> <p>If product in eyes, wash it out immediately with water. 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, goggles and contaminated clothing</p>		

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Free flowing grey brown to brownish granules	<b>Boiling Point/Range:</b>	Not applicable
<b>Odour:</b>	Weak	<b>Freezing/Melting Point:</b>	Not available
<b>pH:</b>	7.0 at 1% w/v (20 - 25°C)	<b>Solubility:</b>	Dispersible in water at 20°C
<b>Vapour Pressure:</b>	Not available	<b>Bulk Density:</b>	0.6 g/cm <sup>3</sup>
<b>Vapour Density:</b>	Not available		

<b>Flash Point:</b>	Not applicable	<b>Explosive Properties:</b>	Not explosive
<b>Upper and Lower Flammable (Explosive) Limits in Air:</b>	Not highly flammable	<b>Oxidising Properties:</b>	Not oxidising
<b>Auto Ignition Temperature:</b>	250°C	<b>Combustibility:</b>	Not applicable
<b>Minimum Ignition energy</b>	>1 J 0.001-2 kJ	<b>Corrosiveness:</b>	Not available
		<b>Dust Explosion class</b>	Forms flammable dust clouds

## Section 10: STABILITY AND REACTIVITY

<b>Chemical Stability:</b>	Stable under normal conditions.
<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. Hazardous polymerization does not occur.

## Section 11: TOXICOLOGICAL INFORMATION

<b>Health Effects from Likely Routes of Exposure:</b>		
<b>Acute:</b>	<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> = 2,062 mg/kg)
	<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> >2,000 mg/kg)
	<b>Inhalation:</b>	<b>LOW TOXICITY</b> Tests on rats indicate this product not harmful due to inhalation of undiluted product. (LC <sub>50</sub> (4 h) >5 mg/L)
	<b>Skin irritation:</b>	<b>NON IRRITANT</b>
	<b>Eye irritation:</b>	<b>IRRITANT</b>
	<b>Sensitisation:</b>	<b>NOT A SENSITISER</b>
<b>Chronic:</b>	<b>Dicamba 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.	

## Section 12: ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	<i>Toxicity to fish:</i>	<b>Practically non-toxic to fish</b> <i>Salmo trutta</i> (trout): LC <sub>50</sub> = 716 mg/L, 96 h <i>Cyprinus carpio</i> (Carp): LC <sub>50</sub> >1,027 mg/L, 96h
	<i>Toxicity to daphnia and other aquatic invertebrates:</i>	<b>Practically non-toxic to Daphnia</b> <i>Daphnia magna</i> (Water flea): EC <sub>50</sub> > 1,030 mg/L, 48 h
	<i>Toxicity to algae:</i>	<b>Moderately toxic to algae</b> <i>Pseudokirchneriella subcapitata</i> (green algae): EC <sub>50</sub> = 107 mg/L, 96 h
	<b>Persistence and Degradability:</b>	Dicamba is not persistent in soil or water.
<b>Mobility</b>	Dicamba has very high mobility in soil	
<b>Environmental Fate (Exposure):</b>	Incorporated into organic molecules	
<b>Bioaccumulative Potential:</b>	Dicamba has low potential for bioaccumulation	

**Section 13: DISPOSAL CONSIDERATIONS**

<b>Disposal Methods and Containers:</b>	Single rinse before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. 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.
<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>	None allocated	<b>Subsidiary Risk:</b>	None allocated
<b>UN Proper Shipping Name:</b>	None allocated	<b>Packing Group:</b>	None allocated
<b>Class:</b>	None allocated	<b>Marine Pollutant:</b>	None allocated

<b>AIR TRANSPORT</b> IATA - DGR			
<b>UN Number:</b>	None allocated	<b>Subsidiary Risk:</b>	None allocated
<b>UN Proper Shipping Name:</b>	None allocated	<b>Packing Group:</b>	None allocated
<b>Class:</b>	None allocated		

**Section 15: REGULATORY INFORMATION**

<b>APVMA Product Number:</b>	51183
<b>Poisons Schedule (SUSDP):</b>	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 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.

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