

## SAFETY DATA SHEET

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

<b>Product Name:</b>	<b>AGRAL<sup>®</sup> Spray Adjuvant</b>
<b>Other Names:</b>	<b>Product code:</b> A13654A
<b>Recommended Use:</b>	An adjuvant for use with insecticides, fungicides and herbicides
<b>Company Details:</b>	<b>Syngenta</b> <b>Australia</b> <b>Pty</b> <b>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 damage to eyes
<b>Safety Phrases:</b>	-

### Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

<b>SUBSTANCE</b>	
<b>Chemical Identity of Pure Substance:</b>	Nonyl phenol ethylene oxide condensate
<b>CAS Number:</b>	9016-45-9

<b>MIXTURE</b>		
<b>Chemical Identity of Ingredients</b>	<b>CAS No</b>	<b>Proportion (%w/v)</b>
Nonyl phenol ethylene oxide condensate	9016-45-9	63
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 contact a doctor or 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>Extinguishing media - small fires</i>          Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide extinguisher. DO NOT use direct jet of water.</p> <p><i>Extinguishing media - large fires</i>          Use alcohol-resistant foam or water spray. DO NOT use direct jet of water.</p>
<b>Hazards from Combustion Products:</b>	This product contains combustible organic components that may burn and decompose during a fire producing dense black smoke containing hazardous products of combustion. Exposure to decomposition products may be a hazard to health.
<b>Special Protective Precautions and Equipment for Fire Fighters:</b>	Wear full protective clothing and self-contained breathing apparatus.

## Section 6: ACCIDENTAL RELEASE MEASURES

<b>Emergency Procedures:</b>	Product is slippery when spilt. 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, PVC gloves and protective equipment to prevent inhalation of vapours</li><li>(3) Re-position 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 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>	Avoid contact with eyes and skin. When using the product wear cotton overalls buttoned to the neck (or equivalent clothing), elbow-length PVC/rubber gloves and goggles
<b>Conditions for Safe Storage:</b>	Keep out of reach of children. 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
<b>Syngenta Exposure Standards:</b>	No exposure standard allocated
<b>Engineering Controls:</b>	No special requirements. Product is used outdoors
<b>Personal Protective Equipment:</b>	Avoid contact with eyes and skin. When using the product wear cotton overalls buttoned to the neck (or equivalent clothing), elbow-length PVC/rubber gloves and goggles.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Pale yellowish, liquid	<b>Boiling Point/Range:</b>	Not available
<b>Odour:</b>	Alcohol odour	<b>Freezing:</b>	Not available
<b>pH:</b>	5.8 (1% aqueous)	<b>Solubility:</b>	Soluble in water
<b>Vapour Pressure:</b>	0.007 kPa approx	<b>Specific Gravity:</b>	0.99 g/cm <sup>3</sup>
<b>Vapour Density:</b>	>1 (air = 1)	<b>Viscosity:</b>	210 cP (B field)
<b>Volatility by weight:</b>	2.75%		

<b>Flash point:</b>	>100°C	<b>Explosive properties:</b>	Not explosive
<b>Upper and Lower Flammable (Explosive) Limits in Air:</b>	Not available	<b>Oxidising properties:</b>	Reacts with oxidising agents
<b>Ignition Temperature:</b>	Not available	<b>Combustibility:</b>	Combustible
		<b>Corrosiveness:</b>	Not available

## Section 10: STABILITY AND REACTIVITY

<b>Chemical Stability:</b>	Stable under standard 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

## Section 11: TOXICOLOGICAL INFORMATION

<b>Health Effects from Likely Routes of Exposure:</b>	
<b>Acute:</b>	No LD <sub>50</sub> data available for this product or the active ingredient
<b>Oral toxicity:</b>	Swallowing may result in irritation of the gastrointestinal tract
<b>Dermal toxicity:</b>	Contact with skin may result in irritation and will have a decreasing action. Repeated or prolonged skin contact may lead to irritant contact dermatitis
<b>Inhalation:</b>	When used in poorly ventilated area/at elevated temperatures/in confined spaces vapour may cause irritation to mucous membranes and respiratory tract, headaches and nausea
<b>Skin irritation:</b>	<b>MODERATE IRRITANT</b> (rabbit)
<b>Eye irritation:</b>	<b>MODERATE IRRITANT</b> (rabbit)
<b>Sensitisation:</b>	Not available
<b>Chronic:</b>	No information on chronic toxicity available

## Section 12: ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	<p>The active ingredient nonyl phenol ethoxylate is <b>Moderately toxic to aquatic organisms</b></p> <p>LC<sub>50</sub> (96 hours) = 1.3→1,000 mg/L Bluegill Sunfish          LC<sub>50</sub> (48 hours) = 2.9–12.5 mg/L Water Flea, (<i>Daphnia magna</i>)          LC<sub>50</sub> (24 hours) = 44.2 mg/L Water Flea (<i>Daphnia magna</i>)</p> <p>The degradation product nonyl phenol is <b>Highly toxic to aquatic organisms</b></p> <p>LC<sub>50</sub> (48 hours) = 0.47 mg/L <i>Ceriodaphnia dubia</i>          LC<sub>50</sub> (96 hours) = 0.42 mg/L Brown Shrimp          LC<sub>50</sub> (96 hours) = 0.2 mg/L Lobster          LC<sub>50</sub> (96 hours) = 3 mg/L Mussel          LC<sub>50</sub> (96 hours) = 0.51 mg/L Hook Nose Fish          LC<sub>50</sub> (96 hours) = 3 mg/L Cod          LC<sub>50</sub> (96 hours) = 0.3 mg/L Flathead</p>
<b>Persistence and Degradability:</b>	Biodegradation of nonylphenol ethoxylates proceeds through the formation of water insoluble intermediates which are more toxic to aquatic biota. Primary degradation of NPE was 98% within 30 days. Substantially biodegradable. DOC 82%
<b>Mobility</b>	Not available
<b>Environmental Fate (Exposure):</b>	Incorporated into organic molecules
<b>Bioaccumulative Potential:</b>	Not available

## 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 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 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		

<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>	No

<b>AIR TRANSPORT</b> ICAO / IATA			
<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>	54116
<b>Poisons Schedule (SUSDP):</b>	Exempt

### Section 16: OTHER INFORMATION

<b>Date of preparation or last revision:</b> March 2013
<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 Manager, Syngenta Australia Pty Ltd (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.
<b>DISCLAIMER</b> 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.