

SAFETY DATA SHEET

Section 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	INNOVA[®] ALPHA 100 DUO Insecticide
Other Names:	Proper shipping name: Environmentally Hazardous Substance, Liquid, N.O.S. (alpha cypermethrin) Applicable only for marine and air transport
Recommended Use:	Insecticide for use on certain field crops, pastures, fruit and vegetables
Company Details:	Syngenta Crop Protection Pty Limited ABN 33 002 933 717
Address:	Level 1, 2-4 Lyonpark Road MACQUARIE PARK NSW 2113 AUSTRALIA
Telephone Number:	(02) 8876 8444
Emergency Telephone Number:	24 hours - 1800 033 111

Section 2: HAZARDS IDENTIFICATION

Hazard Classification:	Classified as a hazardous chemical according to the Australian criteria for the classification of chemicals
Risk Phrases:	R20/22 Harmful by inhalation and if swallowed R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.
Safety Phrases:	—

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE	
Chemical Identity of Pure Substance:	Alpha cypermethrin
Synonym:	---
CAS Number:	67375-30-8

MIXTURE		
Chemical Identity of Ingredients	CAS No	Proportion (% w/v)
Alpha cypermethrin	67375-30-8	10
Liquid hydrocarbon	647742-94-5	76
Other ingredients determined not to be hazardous	-	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. DO NOT induce vomiting unless told to do so by a doctor or Poisons Information Centre.</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: Remove to fresh air. If symptoms develop or persist seek medical advice.</p>
Poisoning Symptoms: Medical Advice:	<p>Poisoning symptoms in laboratory animals were non-specific</p> <p>There is no specific antidote available. Treat symptomatically. In cases of skin contact application of vitamin E cream has been found to have very high therapeutic value.</p>

Section 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	<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>
Hazards from Combustion Products:	<p>Combustion products may be toxic and/or irritating. Take appropriate protective measures. In a fire formation of oxides of carbon, nitrogen and possible toxic fumes of hydrogen chloride and phosgene can be expected.</p>
Special Protective Precautions and Equipment for Fire Fighters:	<p>In the event of fire, wear self-contained breathing apparatus and protective clothing</p>

Section 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedures:	In case of spillage it is important to take all steps necessary to <ul style="list-style-type: none">• Avoid eye and skin contact• Avoid contamination of waterways
Methods and Materials for Containment and Clean Up:	Procedure for spill <ol style="list-style-type: none">(1) Keep all bystanders away(2) Wear goggles, half face-piece respirator with combined dust and vapour cartridge, 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

Precautions for Safe Handling:	Harmful if swallowed. Will irritate the eyes and skin. Facial skin contact may cause temporary facial numbness. Avoid contact with eyes and skin. Avoid inhaling vapour or spray mist. When preparing spray wear: <ul style="list-style-type: none">• cotton overalls buttoned to the neck and wrist• washable hat• elbow-length PVC gloves• face shield or goggles 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, face shield or goggles and contaminated clothing.
Conditions for Safe Storage:	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

National Exposure Standards:	No exposure standard allocated
Syngenta Exposure Standards:	The manufacturer of the solvent recommends an exposure limit of 100 mg/m ³ , 17 ppm TWA as total hydrocarbon
Biological Limit Values:	No biological limits allocated
Engineering Controls:	No special requirements. Product is used outdoors.
Personal Protective Equipment:	<p>Harmful if swallowed. Will irritate the eyes and skin. Facial skin contact may cause temporary facial numbness. Avoid contact with eyes and skin. Avoid inhaling vapour or spray mist. When preparing spray wear:</p> <ul style="list-style-type: none"> • cotton overalls buttoned to the neck and wrist • washable hat • elbow-length PVC gloves • face shield or goggles <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, face shield or goggles and contaminated clothing.</p>

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear amber liquid	Boiling Point/Range:	135°C approximately
Odour:	Aromatic hydrocarbon odour	Melting Point:	<0°C
pH:	4-7	Solubility:	Emulsifiable in water
Vapour Pressure:	Not available	Specific Gravity or Density:	0.92-0.94 at 20°C
Vapour Density:	Not available	Volatile components	60%

Flash Point:	>63°C	Explosive Properties:	Not available
Upper and Lower Flammable (Explosive) Limits in Air:	Not available	Oxidising Properties:	Not available
Ignition Temperature:	Not available	Combustibility:	Combustible C1
		Corrosiveness:	Not available

Section 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal storage conditions
Conditions to Avoid:	Keep away from high temperatures (at or near flash point), open flame, sparks and direct sunlight. Store in the closed, original container in a cool, well ventilated area.
Incompatible Materials:	Strong acids, bases and oxidising agents
Hazardous Decomposition Products:	Combustion or thermal decomposition will evolve toxic and irritant vapours
Hazardous Reactions:	None known Hazardous polymerisation is unlikely to occur

Section 11: TOXICOLOGICAL INFORMATION

Health Effects from Likely Routes of Exposure:		
Acute:	Oral toxicity:	TOXIC Tests on rats indicate this product is toxic following single doses of undiluted active ingredient. (LD ₅₀ >79-475)
	Dermal toxicity:	LOW TOXICITY Tests on rabbits indicate this product has a low toxicity following skin contact with undiluted active ingredient. (LD ₅₀ >2,000 mg/kg)
	Inhalation:	LOW TOXICITY Tests on rats indicate this product not harmful due to inhalation of undiluted active ingredient. LC ₅₀ (4h) >0.32 mg/L air
	Skin irritation:	MILD IRRITANT
	Eye irritation:	MILD IRRITANT
	Sensitisation:	NOT A SENSITISER
Chronic:	Animal testing indicates that alpha cypermethrin is non mutagenic	

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity:	<i>Toxicity to fish:</i> Highly toxic to fish <i>Oncorhynchus mykiss</i> (rainbow trout): LC ₅₀ = 0.0028 mg/L, 96 h
	<i>Toxicity to daphnia and other aquatic invertebrates:</i> Highly toxic to aquatic invertebrates <i>Daphnia magna</i> (Water flea): EC ₅₀ = 0.1 – 0.3 mg/L, 48 h
	<i>Toxicity to bees:</i> Highly to bees LD ₅₀ = 0.059 µg/bee, 24 h
	<i>Toxicity to birds:</i> Practically non toxic to birds Mallard duck, Quail: LC ₅₀ >10,000 mg/kg
	<i>Toxicity to soil dwelling organisms:</i> Low toxicity to earthworms <i>Eisenia foetida</i> (earthworm): LC ₅₀ >100 mg/kg, 14 day
Persistence and Degradability:	Alpha cypermethrin readily biodegrades in soil
Mobility:	Alpha cypermethrin is immobile in soil
Environmental Fate (Exposure):	Alpha cypermethrin is readily degraded by microorganisms
Bioaccumulative Potential:	Alpha cypermethrin has a potential to bioaccumulate, but this is expected to be reduced to its rapid metabolism

Section 13: DISPOSAL CONSIDERATIONS

Disposal Methods and Containers:	Triple or preferably pressure rinse empty 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.
Special Precautions for Landfill or Incineration:	Not applicable

Section 14: TRANSPORT INFORMATION

LAND TRANSPORT ADG			
UN Number:	None allocated	Packing Group:	None allocated
UN Proper Shipping Name:	None allocated	Special Precautions for User:	None allocated
Class:	None allocated	Hazchem 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. (alpha cypermthrin)	Packing Group:	III
Class:	9	Marine Pollutant:	Marine pollutant

AIR TRANSPORT IATA - DGR			
UN Number:	3082	Subsidiary Risk:	None allocated
UN Proper Shipping Name:	Environmentally Hazardous Substance, Liquid, N.O.S. (alpha cypermthrin)	Packing Group:	III
Class:	9	Special Precautions for User:	2XE

Section 15: REGULATORY INFORMATION

APVMA Product Number:	61528
Poisons Schedule (SUSDP):	S6

Section 16: OTHER INFORMATION

Date of preparation or last revision: December 2011

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.

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