


Section 1: Identification: Product identifier and chemical identity

Product Identifier:	ALPHA DUOP 100 INSECTICIDE
Active Constituent:	100 g/L Alpha Cypermethrin 735 g/L Liquid Hydrocarbons
Other Means of Identification:	Agricultural Insecticide. Grow Choice product code number: 2005 AVPMA registered number: 53298
Recommended Use:	For the control of insect pests including heliothis (<i>Helicoverpa</i> spp.) on various crops and red legged earth mite and blue oat mite on certain field crops and pastures and certain pests on fruit and vegetable crops as specified in the Directions For Use table.
Details of manufacturer or importer:	Grow Choice Pty Ltd ABN 36 161 264 884
Address:	113 Fitzroy Street TAMWORTH NSW 2340 AUSTRALIA
Website:	www.growchoice.com.au
Phone Number & Email:	(02) 6766 3979 - admin@growchoice.com.au
Emergency Phone Number:	In Case Of Emergency Dial 000
Poisons Information Centre:	Phone: 13 11 26 and speak to a Poisons Information Specialist. Fax: +61 2 9845 3597 http://www.chw.edu.au/poisons/contact.htm

Section 2: Hazards identification (cont. page 2)

Classified as HAZARDOUS in accordance with the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)] 3rd Edition and the Globally Harmonized System of Classification and Labelling of Chemicals (the GHS).	
Considered non-dangerous for road and rail transport by the Australian Code for the Transport of Dangerous Goods Road and Rail (August 2014 edition)	
Considered DANGEROUS for transport by sea and air in accordance with the IMDG Code 37-14 (refer Section 14)	
SUSMP Classification: S6	
ADG Classification: Class 6.1: Toxic Substances	
UN Number: 3016, BIPYRIDILIUM PESTICIDE, LIQUID, TOXIC	
Classification of the hazardous chemical:	Flammable liquids Category 4 Acute Toxicity Oral Category 4 Aspiration Hazard Category 1 Specific Target Organ Toxicity - Single Exposure Category 3 Specific Target Organ toxicity - repeated exposure Category 2 Hazardous to aquatic environment Short term/Acute Category 2
GHS Symbol:	
GHS Signal word:	WARNING
Hazard Statement:	H227: Combustible liquid. H302: Harmful if swallowed. H304: May be fatal if swallowed and enters airways. H336: May cause drowsiness or dizziness. H373: May cause damage to organs through prolonged or repeated exposure. H401: Toxic to aquatic life.

Prevention:	P210: Keep away from heat, sparks, open flames and hot surfaces. - No smoking. P260: Do not breathe fumes, mists, vapours or spray. P262: Do not get in eyes, on skin, or on clothing. P264: Wash contacted areas thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P273: Avoid release to the environment. P280: Wear protective gloves, protective clothing and eye or face protection.
Response:	P314: Get medical advice or attention if you feel unwell. P362: Take off contaminated clothing and wash before reuse. P301+P310: IF SWALLOWED: Immediately call a POISON CENTRE or doctor. P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water. P381: Eliminate all ignition sources if safe to do so. P391: Collect spillage. P370+P378: In case of fire, use carbon dioxide, dry chemical, foam, water fog. Water fog or fine spray is the preferred medium for large fires.
Storage:	P405: Store locked up.
Statements:	P410: Protect from sunlight. P403+P235: Store in a well-ventilated place. Keep cool. Refer Section 7
Disposal:	P501: Dispose of contents and container in accordance with local, regional and national regulations.
Other Information:	Poisons Schedule S6

Section 3: Composition and information on ingredients

Chemical ingredients: CAS number and other unique identifiers: Concentration of ingredients		
Component	CAS No	Proportion
Alpha-cypermethrin	67375-30-8	100 g/L
Liquid hydrocarbon	64742-94-5	755 g/L

Section 4: First aid measures

In Case Of Emergency Dial 000 and/or Poisons Information Centre: Phone: 13 11 26 and speak to a Poisons Information Specialist. Take this SDS and or DFU/Label with you or when calling the Poisons Information Centre.	
General Advice:	Those who offer First Aid should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.
Swallow:	If swallowed, DO NOT induce vomiting. Rinse mouth out with water if patient is conscious. Seek urgent medical attention.
Eye:	If product gets in eyes, remove contact lenses if wearing and wash it out immediately with water for several minutes. Seek medical attention.
Skin:	Remove contaminated clothing and wash affected areas thoroughly with soap and water. Seek medical attention if concerned.
Inhaled:	Move affected person to fresh air and keep at rest until recovered. If inhaled remove to fresh air and keep at rest. Obtain medical advice if at all worried. If not breathing give artificial respiration and get medical attention as soon as possible.

Section 5: Fire fighting measures

Fire and explosion hazards:	The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is little risk of an explosion from this product if commercial quantities are involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.
Suitable Extinguishing Media:	Use carbon dioxide, dry chemical, foam or water fog. Water fog or fine spray is the preferred medium for large fires. Contain spills, minimise spillage entering drains or water courses.
Fire Fighting:	If a significant quantity of this product is involved in a fire, call the fire brigade. Recommended personal protective equipment is liquid-tight chemical protective clothing and breathing apparatus.
Flash Point:	>63°C (Pensky Martin closed cup) ASTM D 93
Upper Flammability Limit:	No data.
Lower Flammability Limit:	No data.
Auto ignition temperature:	No data.
Flammability Class:	Flammable Category 4 (GHS), C1 combustible (AS 1940)

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:	In case of spillage it is important to take all steps necessary to: Instruct and ensure all bystanders to keep away from and upwind of spill/leak. Avoid eye and skin contact; Do not breathe dust; Ensure adequate ventilation; Avoid contamination of waterways; Refer to Section 8 for Personal Protection Equipment (PPE). Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.
Environmental precautions:	Avoid contamination of waterways.
Methods for containment and cleaning up:	Reposition any leaking containers so as to minimise leakage. Dam and absorb spill with an absorbent material (e.g. sand or soil) or proprietary absorbent such as vermiculite. Shovel the absorbed spill into drums. Collect in a suitable, closed container to dispose and clean the spilled area with water.

Section 7: Handling and storage (cont. page 4)

Precautions for safe handling:	Safe work practices are recommended. Avoid contact with eyes and skin. When opening the container and preparing spray wear appropriate PPE (refer Section 8). Do not spray under high wind conditions. Hygiene measures: When using products, do not eat, drink or smoke. Contaminated work clothing should not be allowed out of the workplace. Wash hands thoroughly with soap and water after use and before eating, drinking, smoking/using tobacco, chewing gum, using the toilet or applying cosmetics. After each day's use, wash gloves, face shield or goggles and contaminated clothing. Avoid contact with eyes and skin.
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Conditions for safe storage, including incompatibilities: Keep out of reach of children, unauthorised persons and animals.
 Store in tightly sealed original containers in a dry secure place away from fertilizers, feed and food.
 Store out of direct sunlight and extreme temperature.
 Always read the label and any attached leaflet before use.

Section 8: Exposure controls and personal protection

Appropriate engineering controls: Control process conditions to avoid contact. Use in a well-ventilated area only. Use local exhaust ventilation to keep exposure levels below the exposure limits above. Keep stored in original container in a cool, well ventilated area, keeping the lid closed at all-times whilst in storage.

Personal protective equipment (PPE): When opening the container and preparing the spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow length PVC chemical resistant gloves and face shield or goggles.
 When using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, and optional once chemical is prepared for use, elbow length PVC chemical resistant gloves and face shield or goggles if protected from spray drift/contamination.
Face and Eye Protection: Face shield or goggles.
Clothing: Cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat.
Gloves: Elbow-length chemical resistant PVC gloves.
Respiratory: If airborne concentrations are likely to exceed the exposure standards above or if exposed to dust, an AS/NZS 1715/1716 approved respirator should be worn.
 Recommended to use Australian and New Zealand Standard PPE:
 Overalls: AS 3765, Clothing for protection against Hazardous chemicals
 Gloves: AS/NZS 2161, Industrial safety gloves and mittens (not electrical and medical gloves)
 Goggles and face shield: AS/NZS 1337, Eye protectors for industrial applications.
 Footwear: AS/NZS 2210, Occupational protective footwear
 Respirators: AS/NZS 1715 Selection, Use and Maintenance of Respiratory Protective Devices
 AS/NZS 1716, Respiratory Protective Devices

Requirements concerning special training: Check State and/or Territory regulations that require people who use pesticides in their job or business to have adequate training in the application of the materials.

The ADI for Alpha cypermethrin is set at 0.05mg/kg/day. The corresponding NOEL is set at 4.7mg/kg/day. ADI means Acceptable Daily Intake; NOEL means No-observable-effect-level. Data from Australian ADI List, June 2014.

Section 9: Physical and chemical properties

Appearance: Clear straw coloured liquid	Boiling Point: Approx. 135°C at 100kPa
Odour: Aromatic hydrocarbon odour	pH: No data
Auto Ignition Temp: No data	Evaporation Rate: No data
Vapour Density: No data	Solubility in Water: Emulsifiable
Vapour Pressure: No data	Evaporation Rate: No data
Co-eff Oil/water distribution: No data)	Freezing/Melting Point: Below 0°C
Volatiles: 60%	Volatility: No data
Specific Gravity: 0.92-0.95 at 20°C	Odour Threshold: No data.

Section 10: Stability and reactivity

Reactivity:	This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.
Conditions to avoid:	Keep away from heat, flames and sparks. Keep away from sources of ignition. Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.
Incompatible materials:	Strong acids, strong bases, strong oxidising agents.
Fire Decomposition:	Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed. May form nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. May form hydrogen chloride gas and other compounds of chlorine. Phosgene fumes may be emitted. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.
Polymerisation:	Polymerisation reactions are unlikely; they are not expected to occur.

Section 11: Toxicological information

Information on routes of exposure and symptoms related to exposure	
Acute toxicity:	Oral LD50 (rat) 57 mg/kg for alpha-cypermethrin technical LD50 (rat) >2000 mg/kg for alpha-cypermethrin LD50 (rabbit) >2000 mg/kg for alpha-cypermethrin Acute Toxicity - Dermal Acute Toxicity - LC50 (rat) (4hr) >0.593 mg/l
Inhalation:	Breathing the vapour can result in headaches, dizziness and possible nausea. Breathing in high concentrations of vapour can produce central nervous system depression, which can lead to loss of coordination, impaired judgement and if exposure is prolonged, unconsciousness.
Ingestion:	The concentrate is harmful if swallowed Ingestion of alpha-cypermethrin in relatively large amounts can result in headache, nausea, lethargy, motor weakness and incoordination. Ingestion may cause irritation to the respiratory tract.
Skin:	May irritate the skin. Exposure to alpha-cypermethrin can result in sensations of tingling especially in the face. The effects are transient and generally disappear in one to two days. Topical application of vitamin E cream is effective in reducing discomfort. The occurrence of 'facial sensations' is an indication of exposure. Under these circumstances work practices should be reviewed.
Eye:	The concentrate may cause irritation of the eyes.
Chronic effects:	Repeated exposure could result in peripheral nervous system damage.
Serious eye damage/irritation:	Mild eye irritant.
Skin corrosion/irritation:	Mild skin irritant.
The Australian Acceptable Daily Intake (ADI) for alpha-cypermethrin for a human is 0.05 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 4.7 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing, Office of Chemical Safety, 'ADI List', June 2014).	
Mutagenic effects:	No information was found.
Classification of Hazardous ingredients:	
Ingredient	Risk Phrases
Alpha-cypermethrin	>=10%Conc<20%: Xn; R22; R48/22
Liquid Hydrocarbon	Conc>=10%: Xn; R65

Section 12: Ecological information

Eco toxicity:	This product is toxic to aquatic organisms, may cause long term adverse effects to the aquatic environment. This product is toxic to bees. This product is not readily biodegradable.
Persistence and degradability:	Average field half life of alpha-cypermethrin is 90 days.
Known harmful effects on the environment	Alpha-cypermethrin products do not appear to pose any threat to birds. The product is a marine pollutant for sea transport. Alpha-cypermethrin is toxic to fish.
The following is data for the active ingredient, alpha-cypermethrin	
Acute Toxicity – Fish	Toxic to fish. LC50 (96hr) for rainbow trout is 0.0028 mg/l.
Acute Toxicity - Daphnia	LC50 (48hr) for alpha-cypermethrin is 0.0003 mg/l.
Acute Toxicity - Other Organisms	Birds: Not toxic to birds. LD50 for mallard duck is >10,000 mg/kg Bees: Toxic to bees. LD50 0.059 µg/bee. Should not be applied while bees are actively foraging.

Section 13: Disposal considerations

Product Disposal:	On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals (ChemClear®).
Container Disposal:	Do not use this container for any other purpose. Triple rinse containers; add rinsate to the spray tank, then offer the container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations. drumMUSTER is the national program for the collection and recycling of empty, cleaned, non-returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMUSTER symbol, triple rinse the container, ring your local Council, and offer the container for collection in the program. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, puncture or shred and bury containers in local authority landfill. If no landfill is available, bury the containers below 500mm 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.

Section 14: Transport information

General Transport Information:	It is considered good practice not to transport agricultural chemical products with food, food related materials and animal feed products.
Land:	Considered non-dangerous for road and rail transport by the Australian Code for the Transport of Dangerous Goods Road and Rail (August 2014 edition).
Sea and Air:	Considered DANGEROUS for transport by sea and air in accordance with the IMDG Code 37-14.
UN Number:	3082
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Hazchem Code:	2XE
Special Provisions:	179, 274, 331, 335, AU01
Limited quantities:	ADG 7 specifies a Limited Quantity value of 5 L for this class of product.
DG Class:	Class 9: Miscellaneous Dangerous Goods.
Packing Group:	III
Packing Instruction:	P001, IBC03, LP01
Class 9 Miscellaneous Dangerous Goods shall not be loaded in the same vehicle or packed in the same freight container with Dangerous Goods of Class 1 (Explosives).	

Section 15: Regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP): Schedule 6	
Registration status: Registered	APVMA approval: 53298

Section 16: Any other relevant information

Date of preparation or last revision: This Safety Data Sheet (SDS) was completed 3 January 2022 and replaces SDS dated 16 January 2017.

Acronyms:

AVPMA: Australian Pesticides and Veterinary Medicines Authority.
GHS: Globally Harmonised system of Classification and Labelling of chemicals
AS/NZS: Australian Standards and New Zealand Standards for Personal protective equipment
ADI: Acceptable Daily Intakes For Agricultural And Veterinary Chemicals
ADG: Australian Dangerous Goods
IMDG: International Maritime Code of Dangerous Goods
IATA: International Air Transport Association
ADG: Code Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition)
AICS: Australian Inventory of Chemical Substances
SWA: Safe Work Australia, formerly ASCC and NOHSC
CAS: number Chemical Abstracts Service Registry Number
Hazchem Code: Emergency action code of numbers and letters that provide information to emergency services especially firefighters
IARC: International Agency for Research on Cancer
NOS: Not otherwise specified
NTP: National Toxicology Program (USA)
R-Phrase: Risk Phrase
SUSMP: Standard for the Uniform Scheduling of Medicines & Poisons
UN Number: United Nations Number

END OF SDS

Source of Data: The information provided in this SDS is sourced from Grow Choice 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: Grow Choice Pty Ltd
(02) 6766 3979
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. Grow Choice'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 Grow Choice shall have no liability.

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