SAFETY DATA SHEET

SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **Apparent Alpha Omega 300 SC Insecticide**

Other Names:	Alpha-cypermethrin, a synthetic pyrethroid pesticide, Group 3A Insecticide.
Use:	A liquid broad spectrum agricultural insecticide.
Company:	AIRR Apparent Pty Ltd
Address:	15/16 Princes Street, Newport NSW 2106.
Phone Number:	03 5820 8400
Email:	enquiries@apparentag.com.au
Emergency Contact:	0437 303 689

SECTION 2 HAZARDS IDENTIFICATION

Classified as hazardous according to criteria of Safe Work Australia.
Not classified as a Dangerous Good according to the ADG Code*.

* Not subjected to the ADG code when transported in Australia by Road or Rail in packages 500 kg (L) or less; or in IBC's (refer to SP AU01). However, if transported by Air or Sea, this provision does not apply. Then the product is classed as a Dangerous Good (Class 9 Environmentally Hazardous) by IATA and IMDG respectively. See Section 14 of this SDS for details.

Globally Harmonised System (GHS) classification of the substance/mixture:
Acute Toxicity – Oral: Category 4.
Aspiration Hazard: Category 1.
Specific Target Organ Toxicity (Repeated Exposure): Category 2
Hazardous to the Aquatic Environment – Acute Hazard: Category 1
Hazardous to the Aquatic Environment – Long-Term Hazard: Category 1

Signal Word: DANGER.

Hazard statements:
H302 Harmful if swallowed.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements:
Prevention:
P264 Wash hands, arms and face thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.

Response:
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if feel unwell.
P330 Rinse mouth.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 Do NOT induce vomiting.
P391 Collect spillage.

Storage:
P405 Store locked up.

SECTION 2 HAZARDS IDENTIFICATION (Continued)

Disposal:

P501 Dispose of contents/container in accordance with national regulations.

Pictogram:

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

CHEMICAL	***CAS NUMBER***	***PROPORTION***
Alpha-Cypermethrin	67375-30-8	300 g/L
Other ingredients (including water) determined not to be hazardous		Balance

SECTION 4 FIRST AID MEASURES

FIRST AID

Ingestion: If swallowed do NOT induce vomiting. Wash mouth with water. If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 131 126. Give plenty of water to drink. Get to a doctor or hospital quickly.

Eye contact: Immediately hold eyes open and flood gently with clean water. Ensure irrigation under eyelids by occasionally lifting them. Do not try to remove contact lenses unless trained. If irritation persists, seek medical advice.

Skin contact: Remove contaminated clothing. Wash skin with soap and water to remove chemical. If skin is irritated, seek medical advice.

Inhalation: Remove to fresh air and observe until recovered. If irritation or symptoms persists more than about 30 minutes, seek medical advice.

Advice to Doctor: Alpha-cypermethrin, the active ingredient in this product is a synthetic pyrethroid insecticide. Consider gastric lavage within 4 hours. In case of gross over exposure, subject should be kept under observation. Convulsions should be treated with anticonvulsants. Treatment is otherwise symptomatic and supportive. In cases of skin contact, it has been reported that topical applications of Vitamin E acetate were found to have very high therapeutic value, eliminating almost 100% of the skin pain associated with synthetic pyrethroids.

SECTION 5 FIRE FIGHTING MEASURES

Specific Hazard: When the product is heated, thermal decomposition may generate toxic and noxious fumes.

Extinguishing media: Extinguish fire using carbon dioxide, foam or dry agent. If not available, use waterfog or fine water spray but ensure all runoff is contained.

Hazards from combustion products: Thermal decomposition and burning will produce toxic by-products. Fire-fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or smoke.

Precautions for fire-fighters and special protective equipment: Isolate fire area. Evacuate downwind residents. Wear full protective clothing and self-contained breathing apparatus. Do not breathe smoke or vapours generated.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Emergency procedures: In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and a face shield or goggles. If there is a significant chance that vapours or mists are

SECTION 6 ACCIDENTAL RELEASE MEASURES (Continued)

likely to build up in the cleanup area, the use of a respirator is recommended. Keep out animals and unprotected persons.

In the case of spillage, stop leak if safe to do so, and contain spill. Prevent spillage entering drains or watercourses. Contain and absorb spilled material with absorbent material such as sand, clay, cat litter or material such as vermiculite. Collect recoverable product for use as labelled on the product. Vacuum, shovel or pump contaminated spilled material into an approved container and dispose of waste as per the requirements of Local or State Waste Management Authorities. Launder protective clothing before storage or re-use.

Material and methods for containment and cleanup procedures: To clean spill area, tools and equipment, wash with a solution of soap, water and acetic acid/vinegar. Follow this with a neutralisation step of washing the area with a bleach or caustic soda ash solution. Finally, wash with a strong soap and water solution. Absorb, as above, any excess liquid and add both solutions to the drums of waste already collected. If a significant quantity of material enters drains, advise emergency services.

SECTION 7 HANDLING AND STORAGE

Precautions for Safe Handling: No smoking, eating or drinking should be allowed where material is used or stored. Keep out of reach of children. 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 cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and a 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 well ventilated area away from children, animals, food, feedstuffs, seed and fertilisers. Do not store for prolonged periods in direct sunlight. This product is a Schedule 6 Poison (S6) and must be stored, transported and sold in accordance with the relevant Health Department regulations.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:
Exposure guidelines have not been established for this product by Safe Work Australia. However the following standard may apply:

Atmospheric Contaminant	Exposure Standard (TWA)	STEL (mg/m³)
Aromatic hydrocarbons	100 ppm	Not set

TWA = Time-weight Average

Biological Limit Values:
No biological limit allocated.

Engineering controls:
Use in ventilated areas adequate to keep exposure below the TWA. Keep containers closed when not in use.

Personal Protective Equipment (PPE):
General: When preparing spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and a 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.

Personal Hygiene: 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. Clean water should be available for washing in case of eye or skin contamination. Wash skin before eating, drinking or smoking. Shower at the end of the workday.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear liquid.
Odour:	Hydrocarbon odour.
Boiling point:	No data.
Freezing point:	No data.
Specific Gravity:	No data.
Solubility in Water:	Emulsifies in water.
pH:	No data available.
Flammability:	Combustible.
Corrosive hazard:	Not corrosive.
Flashpoint (°C):	> 62°C.
Poisons Schedule:	S6.
Formulation type:	Emulsifiable concentrate (EC).

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: Product is considered stable in ambient conditions for a period of at least 2 years after manufacture.

Conditions to avoid: Do not store for prolonged periods in direct sunlight. Store away from sources of ignition. Avoid alkaline materials.

Incompatible materials: Avoid strong acids, bases and oxidizing agents.

Hazardous decomposition products: When involved in a fire will emit toxic and noxious decomposition products/fumes.

Hazardous reactions: No particular reactions to avoid.

SECTION 11 TOXICOLOGICAL INFORMATION

No specific data is available for this product as no toxicity tests have been conducted on this product. Information presented is our best judgement based on similar products and/or individual components. As with all products for which limited data is available, caution must be exercised through the use of protective equipment and handling procedures to minimise exposure. This formulation also contains aromatic hydrocarbons.

Inhalation of aromatic hydrocarbon vapours may cause central nervous system depression, dizziness, disturbances in vision and respiratory irritation. Moderately irritating to the eyes. Contact with the skin may be irritating.

Potential Health Effects:

ACUTE EFFECTS

Swallowed: This product is harmful if swallowed; the Acute Oral LD_{50} (rat) = 79 mg/kg (Technical Alpha-cypermethrin). Calculated value for Alpha-Cypermethrin: LD_{50} = 790 mg/kg.

Eye: This product may be irritating to the eyes.

Skin: This product may be irritating to the skin and may be sensitising. Repeated or prolonged exposure may cause irritant contact dermatitis. If substantial contact occurs it could cause facial numbness.

Inhaled: Inhalation of mists or sprays may produce respiratory irritation.

Long Term Exposure:

No data available on this formulation. In studies with laboratory animals, Alpha-cypermethrin Technical did not cause teratogenicity or reproductive toxicity. The overall results from a battery of genotoxicity studies indicate that alpha-cypermethrin is not considered to be genotoxic. Ames test results were negative.

SECTION 12 ECOLOGICAL INFORMATION

Environmental Toxicology: No data is available on this product. The physical and environmental properties of Alpha-cypermethrin are similar to cypermethrin. Alpha-cypermethrin is toxic to fish and aquatic arthropods. Do not contaminate sewers, drains, dams, creeks or any other waterways with product or the used container.

Cypermethrin is very slightly toxic to birds and Oral LD_{50} values are greater than 10,248 mg/kg. Cypermethrin is considered highly toxic to fish and aquatic arthropods and has LC_{50} values which range from 0.004 µg/L to 3.6 µg/L. The aquatic arthropods tend to be some of the more sensitive species. Dangerous to bees. DO NOT spray on any plants in flower while bees are foraging. DO NOT spray or contaminate cats with this product as it can be toxic to cats.

Environmental Fate: The physical and environmental properties of Alpha-cypermethrin are similar to cypermethrin. Cypermethrin has a high affinity for organic matter and a Log P_{ow} of 5.0, yet, because of the ease with which the material undergoes degradation, it has a very low potential for bioconcentration and is not mobile in soil. Cypermethrin is rapidly degraded in soil with a half life of 2 to 4 weeks. It is rapidly hydrolysed under basic conditions (pH = 9) but, under acidic and neutral conditions, hydrolysis half life can be 20 to 29 days.

SECTION 13 DISPOSAL CONSIDERATIONS

Spills and Disposal: Persons involved in cleanup require adequate skin protection - see Section 8. Keep material out of streams and sewers. Vacuum, shovel or pump waste into an approved drum. To decontaminate spill area, tools and equipment, wash with detergent and water and add the solution to the drums of wastes already collected and label contents. Dispose of drummed wastes, including decontamination solution in accordance with the requirements of Local or State Waste Management Authorities.

Disposal of empty containers: Triple-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 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.

SECTION 14 TRANSPORT INFORMATION

Road & Rail Transport: This product is exempt from classification as a Dangerous Good in packs less than 500 kg (L) or less; or in IBC's under the Australian Code for the Transport of Dangerous Goods by Road and Rail. For bulk shipments this product is a class 9, UN 3082. (See special provision AU01).

Marine and Air Transport: Apparent Alpha Omega 300 SC Insecticide is a Marine Pollutant according to International Maritime Dangerous Goods (IMDG) Code and the International Air Transport Association (IATA). If transporting by sea or air the following Dangerous Goods Classification applies:-
UN 3082, Class 9 (Miscellaneous Dangerous Goods), Packing Group III, Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains 30% Alpha-cypermethrin). Hazchem ●3Z. Hazard Identification Number (HIN) 90. Australian Standards Initial Emergency Response Guide No. 47

SECTION 15 REGULATORY INFORMATION

Under the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP), this product is a Schedule 6 poison.

This product is registered with the Australian Pesticides and Veterinary Medicines Authority. APVMA number 90030.
This product is classified as a Hazardous Substance under the criteria of Safe Work Australia.

SECTION 15 REGULATORY INFORMATION (Continued)

This product is not classified as a Dangerous Good according to the ADG Code (7th Ed).
This product is classified as a Dangerous Good according to International Maritime Dangerous Goods (IMDG) Code and the International Air Transport Association (IATA).

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

SECTION 16 OTHER INFORMATION

Issue Date: 18 November 2021. Valid for 5 years till 18 November 2026 (First

Issue). Key to abbreviations and acronyms used in this SDS:

ADG Code	Australian Dangerous Goods Code (for the transport of dangerous goods by Road and Rail).
Carcinogen	An agent which is responsible for the formation of a cancer.
Genotoxic	Capable of causing damage to genetic material, such as DNA.
HCIS:	Hazardous Chemical Information System.
Lacrimation	The production, secretion, and shedding of tears.
Lavage	A general term referring to cleaning or rinsing.
Mutagen	An agent capable of producing a mutation.
Pneumonitis	A general term that refers to inflammation of lung tissue.
PPE	Personal protective equipment.
Teratogen	An agent capable of causing abnormalities in a developing foetus.
TWA	The Time Weighted Average airborne concentration over an eight-hour working day, for a five day working week over an entire working life.
Safe Work Australia:	Formally known as Australian Safety & Compensation Council (ASCC) which was formally known as the National Occupational Health & Safety Commission (NOHSC).

References

1. “Hazardous Chemicals Information System”. Safe Work Australia HCIS website. (2021).
2. “Classifying Hazardous Substances” Safe Work Australia. August 2018.
3. Globally Harmonized System of Classification and Labelling of Chemicals (GHS). United Nations, 2009.

This SDS 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.

End SDS