SAFETY DATA SHEET

SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **Apparent Stockade Insecticide**

Other Names: Bifenthrin, Group 3A Insecticide.
Use: A liquid broad spectrum pyrethroid 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.
Classified as a Dangerous Good according to the ADG Code.
Combustible Liquid (C1).

GHS Classification:
Flammable Liquids – Hazard Category 4.
Acute Toxicity – Inhalation: Category 3.
Carcinogenicity: Category 2.
Sensitization – Skin: Category 1, 1A, 1B
Acute Toxicity – Oral: Category 2.
Specific Target Organ Toxicity (Repeated Exposure): Category 1.
Hazardous to the Aquatic Environment – Long-Term Hazard: Category 1.

Signal Word: DANGER.

Hazard Statements:
H227 Combustible Liquid.
H300 Fatal if swallowed.
H304 May be fatal if swallowed and enters airways.
H317 May cause an allergic skin reaction.
H331 Toxic if inhaled.
H351 Suspected of causing cancer.
H372 Causes damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:
Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe mist, vapours or spray.
P264 Wash hands, arms and face thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

SECTION 2 HAZARDS IDENTIFICATION (Continued)

Response:

P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P321	Specific treatment (see Safety Directions on this label).
P330	Rinse mouth.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash before reuse.
P370 + P378	In case of fire use carbon dioxide, foam or dry agent to extinguish.
P391	Collect spillage.

Storage:

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Disposal:

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

Pictograms:

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

CHEMICAL	*CAS NUMBER*	*PROPORTION*
Bifenthrin	82657-04-3	250 g/L
Liquid Hydrocarbons	64742-47-8	666 g/L
Other ingredients determined not to be hazardous		Balance

SECTION 4 FIRST AID MEASURES

FIRST AID

Ingestion: If swallowed do NOT induce vomiting. Wash mouth with water and give water to drink. If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 131 126. Prevent vomit from entering the lungs by careful placement of the patent.

Eye contact: Immediately hold eyes open and flush gently with copious amounts of 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: Immediately wash skin with soap and water to remove chemical. If skin is irritated, seek medical advice. Remove contaminated clothing. Launder contaminated clothing before re-use.

Inhalation: Remove to fresh air and observe until recovered. If effects persist, seek medical advice.

Advice to Doctor: Bifenthrin, the active ingredient in this product, is a pyrethroid insecticide. The formulation also contains petroleum distillates that can cause severe pneumonitis or fatal pulmonary oedema if aspirated. Consideration should be given to gastric lavage with an endotracheal tube in place.

Exposure to bifenthrin 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. Treatment is otherwise symptomatic and supportive.

SECTION 5 FIRE FIGHTING MEASURES

Specific Hazard: Product is a combustible Liquid (C1). Flash point 69°C.

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. Contain all runoff.

Hazards from combustion products: On burning will emit toxic fumes of carbon monoxide, carbon dioxide, hydrogen chloride, chlorine, fluorine and hydrogen fluoride etc.

Precautions for fire-fighters and special protective equipment: Isolate fire area. Evacuate downwind residents. Firefighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or smoke. Do not breathe smoke or vapours generated.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Emergency procedures: Isolate and post spill area. Keep out unprotected persons and animals. Wear cotton overalls over normal clothing, buttoned to the neck and wrist and a washable hat and elbow length PVC gloves and goggles. 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. Keep out animals and unprotected persons. 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.

Do NOT allow spilled product or wash solution to enter sewers, drains, dams, creeks or any other waterways.

SECTION 7 HANDLING AND STORAGE

Precautions for Safe Handling: Ensure containers are kept closed until using product. Attacks eyes. Poisonous if swallowed. Harmful if inhaled. Will irritate the skin. Avoid contact with eyes and skin. Do not inhale vapour. When opening the container and preparing spray wear cotton overalls buttoned to the neck and wrist and a washable hat, and elbow-length PVC gloves and goggles. If applying by hand, wear cotton overalls over normal clothing, buttoned to the neck and wrist and a washable hat and elbow length PVC gloves. If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves, 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. Store in a locked room or place away from children, animals, food, feedstuffs, seed and fertilisers. This product is a Schedule 6 Poison (S6) and must be stored, transported and sold in accordance with the relevant Health Department regulations.

This product is classified as a C1 (Combustible Liquid) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to state regulations for storage and transport requirements.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:
No exposure guidelines have been established for this product by Safe Work Australia, however the manufacturer of the solvent recommends the following occupational exposure limit: TWA – 300 mg/m^3.

Biological Limit Values:
No biological limit allocated.

Engineering controls: Use in ventilated areas. Keep containers closed when not in use.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)

Personal Protective Equipment (PPE):
General: When opening the container and preparing spray wear cotton overalls buttoned to the neck and wrist and a washable hat, and elbow-length PVC gloves and goggles. If applying by hand, wear cotton overalls over normal clothing, buttoned to the neck and wrist and a washable hat and elbow length PVC gloves. If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves, goggles and contaminated clothing.

Personal Hygiene: 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 straw to pale yellow coloured liquid.
Odour:	Liquid hydrocarbon odour.
Boiling point:	No data.
Freezing point:	No data.
Specific Gravity:	Approximately 1.0.
Solubility in Water:	Product emulsifies in water.
pH:	5.5 – 7.5.
Flammability:	Combustible liquid (C1).
Flash point:	69°C.
Poisons Schedule:	Product is a Schedule 6 poison.
Formulation type:	Emulsifiable Concentrate (EC).
Corrosive hazard:	Not corrosive.

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. Avoid excessive sources of heat and naked flames.

Incompatible materials: Strong oxidising agents.

Hazardous decomposition products: When the product is heated to high temperatures, thermal decomposition may generate toxic and noxious fumes, including carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen chloride and hydrogen fluoride.

Hazardous reactions: Hazardous polymerisation will not occur.

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 product is poisonous if swallowed and harmful if inhaled. Will irritate the skin. Ingestion of large doses of bifenthrin by laboratory animals produced signs of toxicity which included clonic convulsions, tremors and bloody nasal discharge. Irritating to eyes and respiratory system. This formulation also contains liquid hydrocarbons. Harmful: May cause lung damage if swallowed. Inhalation of liquid 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. Dermal sensitisation may occur.

Potential Health Effects:

ACUTE EFFECTS

Swallowed: This product is poisonous if swallowed; the acute oral LD_{50} (rat) = 250 mg/kg (Similar product).

SECTION 11 TOXICOLOGICAL INFORMATION (Continued)

Eye: This product is irritating to the eyes. Symptoms may include stinging and reddening of eyes and watering. If exposure is brief, symptoms should disappear once exposure has ceased.

Skin: This product has a low dermal toxicity. The extrapolated acute dermal LD_{50} (rabbit) > 2000 mg/kg. Skin contact may result in irritation with a degreasing action on the skin. Repeated or prolonged skin contact may lead to irritant contact dermatitis. Exposure to bifenthrin 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.

Inhaled: This product is harmful if inhaled. Inhalation of liquid hydrocarbon vapours may cause dizziness, disturbances in vision and irritation to the eyes, skin and mucous membrane of the respiratory and gastrointestinal tracts. The acute inhalation LC_{50} = 1.65 mg/L/4 hour (calculated).

Long Term Exposure:

Chronic toxicity: No data available on this formulation. In studies with laboratory animals, Bifenthrin Technical did not cause teratogenicity or reproductive toxicity. Tremors were associated with repeated exposure of dogs, rats, rabbits and mice to Bifenthrin. The overall results from a battery of genotoxicity studies indicate that Bifenthrin is not considered to be genotoxic. Ames test results were negative.

Safe Work Australia has classified bifenthrin in the occupational environment as a suspected human carcinogen - Category 2 substance. This means that there is not sufficient data to classify bifenthrin as a Category 1 substance, but there is limited evidence of carcinogenicity in animal studies.

Kidney and liver damage is possible from over-exposure to liquid hydrocarbons over long periods. Additionally, some reversible haematopoietic depression has been observed in animals with extended exposure to liquid hydrocarbons.

SECTION 12 ECOLOGICAL INFORMATION

Environmental Toxicology: The active ingredient, Bifenthrin, is highly toxic to fish and aquatic arthropods with LC_{50} values ranging from 0.0038 µg/L to 17.8 µg/L. In general, the aquatic arthropods are the most sensitive species. Care should be taken to avoid contamination of the aquatic environment. Bifenthrin had no effect on molluscs at its limit of water solubility. Bifenthrin is only slightly toxic to both waterfowl and upland game birds with LC_{50} values range from 1800 mg/kg to > 2,150 mg/kg. Do not contaminate sewers, drains, dams, creeks or any other waterways with product or the used container.

Environmental Fate:
The active ingredient, Bifenthrin, degrades at a moderate rate in agricultural soils (t½ = 50 to 205 days), and more rapidly on the surface of bare soils (t½ = 7 to 62 days). Bifenthrin is tightly bound in most soils and has extremely low water solubility.

SECTION 13 DISPOSAL CONSIDERATIONS

Spills and Disposal: Keep material out of streams and sewers. Dispose of drummed wastes, including decontamination solution in accordance with the requirements of Local or State Waste Management Authorities. In rural areas contact ChemClear http://www.chemclear.com.au for help with collection of unwanted rural chemicals.

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.

Do not cut or weld metal containers. Vapours that form inside the containers may create an explosion hazard.

SECTION 14 TRANSPORT INFORMATION

Transport: Apparent Stockade Insecticide is classified as a Dangerous Goods. UN 3352, PYRETHROID PESTICIDE, LIQUID, TOXIC (25% BIFENTHRIN). Class 6.1, Packaging Group III.

Product is a C1 combustible liquid for storage purposes.

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 68752.
This product is classified as a Hazardous Substance under the criteria of Safe Work Australia. T: Toxic, Xi: Irritant.
This product is classified as a Dangerous Good according to the ADG Code (7th Ed).
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. (Updating GHS classification).

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.
Mutagenic:	Capable of inducing a genetic mutation in an organism.
LD_{50}:	Median Lethal Dose. A statistically derived single dose of a substance that can be expected to cause death in 50% of dosed animals.
OCS:	Office of Chemical Safety.
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. “Search Hazardous Substances”. Safe Work Australia website. (2018).
2. “Approved Criteria for Classifying Hazardous Substances” 3rd Ed. NOHSC Australia. [NOHSC:1008 (2004)]. October 2004.
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