SAFETY DATA SHEET

SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Apparent Troller Herbicide

Other Names: Amitrole + Ammonium Thiocyanate, Group Q herbicide.

Use: A liquid agricultural herbicide.

Company: Apparent Pty Ltd

Address: Suite G.08, 762 Toorak Rd, Glen Iris, Vic. 3146.

PO Box 3092, Cotham PO, Kew, Vic 3101

ACN/ABN: 143 724 136 **Telephone Number:** 03 9822 1321

Email: <u>enquiries@apparentag.com.au</u>

Emergency Contact: 0411 227 338

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.

Globally Harmonised System (GHS) classification of the substance/mixture:

Reproductive Toxicity - Hazard Category 2.

Specific Target Organ Toxicity (Repeated Exposure) – Hazard Category 2.

Hazardous to the Aquatic Environment - Long Term (Chronic) Hazard: Hazard Category 2.

Signal Word: WARNING.

Hazard statements:

H361 Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 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.

P260 Do not breathe mist, vapours or spray.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P308 + P313 IF exposed or concerned: Get medical advice/ attention:

P314 Get medical advice/attention if you feel unwell.

P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

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

Pictogram:





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COMPOSITION/INFORMATION ON INGREDIENTS

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Ingredients:

CHEMICAL CAS NUMBER PROPORTION

Amitrole 61-82-5 250 g/L
Ammonium Thiocyanate 1762-95-4 220 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 and seek medical advice

and show this label or container.

Eye contact: No effects are expected. If irritation does occur, flush contaminated eyes with lukewarm,

gently flowing water until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person

is wearing contact lenses.

Skin contact: Remove contaminated clothing. Wash skin with plenty of soap and water. Contaminated

clothing should be laundered before reuse.

Inhalation: Remove from exposure and observe until recovered. If effects persist, seek medical

advice.

Advice to Doctor: Treat symptomatically. Note that ingestion of ammonium thiocyanate may create symptoms similar to iodism or bromide intoxication.

SECTION 5

FIRE FIGHTING MEASURES

Specific Hazard: There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

Extinguishing media: Not combustible. Extinguish fire using media suited to burning material. If containers are ruptured, contain all runoff.

Hazards from combustion products: Product is likely to decompose after heating to dryness and continued strong heating and will emit toxic fumes. Firefighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or smoke. Eruption of containers is possible if confined at high temperatures. Intact containers exposed to excessive heat should be cooled with water to reduce drum pressure.

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, a washable hat, elbow length rubber gloves and goggles. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, the use of a respirator is recommended. In the case of spillage, stop leak if safe to do so, and contain spill. Contain and absorb spilled material with absorbent material such as sand, clay or cat litter 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. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Thoroughly launder protective clothing before storage or reuse.

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HANDLING AND STORAGE

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Precautions for Safe Handling: Keep out of reach of children. DO NOT inhale spray mist. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

Conditions for Safe Storage: Store in tightly closed original container in a cool, dry well-ventilated area out of direct sunlight when not in use. Not classified as a Dangerous Good. Do not store for prolonged periods in direct sunlight.

SECTION 8

EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

Exposure guidelines have not been established for this product by Safe Work Australia, however an exposure has been established for one ingredient (Amitrole) as per below:

Atmospheric Contaminant	Exposure Standard (TWA)
Amitrole	0.2 mg/m³

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):

<u>General</u>: Although no specific personal protective equipment is required it is good occupational practice to wear suitable personal protective equipment such as overalls and chemical resistant gloves. Avoid contact with eyes and skin. After use, wash hands arms and face thoroughly with soap and water.

<u>Personal Hygiene</u>: DO NOT inhale 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: White to brown coloured liquid.

Odour: No odour.

Boiling point: Approximately 100°C.

Freezing point: Below 0°C. Specific Gravity: 1.1 g/L.

Solubility in Water:

pH:

Soluble in water.

Slightly acid.

Vapour pressure:

No data for product.

Flammability: Not flammable.
Flashpoint (°C): Not applicable.

Poisons Schedule: Schedule 5 (S5) poison. **Formulation type:** Soluble concentrate.

SECTION 10

STABILITY AND REACTIVITY

Chemical Stability: Product is considered stable in ambient conditions for a period of at least 2 years after manufacture. This product is unlikely to spontaneously decompose.

Conditions to avoid: Do not store for prolonged periods in direct sunlight. Avoid strong oxidising agents.

Incompatible materials: Keep away from strong acids, strong bases and strong oxidizing agents.

Hazardous decomposition products: Product is likely to decompose after heating to dryness and continued strong heating and will emit toxic and noxious fumes.

Hazardous reactions: Not known to polymerise.

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TOXICOLOGICAL INFORMATION

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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.

Potential Health Effects:

ACUTE EFFECTS

Swallowed: The estimated LD₅₀ (rat) is > 2000 mg/kg. Small amounts swallowed incidentally as a result

of normal handling operations are not likely to cause injury. However, swallowing larger amounts may cause injury mainly due to the ammonium thiocyanate. Possible symptoms of exposure of the concentrate include: nausea, vomiting, diarrhoea, convulsions and

possibly skin rashes or eruptions.

Eye: May cause eye irritation. The extent of potential injury is not known.

Skin: The estimated LD₅₀ (rat) is > 10000 mg/kg. Prolonged and repeated contact may cause

slight irritation. Prolonged skin contact is unlikely to result in absorption of harmful amounts. Prolonged or frequently repeated skin contact may cause allergic skin reactions in some

individuals.

Inhaled: No adverse effects are anticipated from single exposure to vapour. Mist may cause

irritation of upper respiratory tract (nose and throat).

Long Term Exposure:

Systemic (Other Target Organ) Effects: For the active ingredient, in animals, effects have been reported on the following organs: Blood, kidney, liver. For Glycol Ethers, in animals, effects have been reported in the testes.

Cancer Information: For Amitrole: Based on the results of animal studies, liver and thyroid effects may result. The weight of evidence is that amitrole is not carcinogenic. For Ammonium Thiocyanate: Ingestion of this substance may lead to an effect that mimics iodism, ie a condition resulting from an overdose of iodine, characterised by running eyes and nose, salivation and skin eruptions.

Teratogenic effects: Safe Work Australia has classified Amitrole in the occupational environment as a reproductive risk - Category 2 substance (possible risk of harm to the unborn child). It is unlikely that reproductive effects will occur in humans in normal circumstances. Birth defects have occurred in the pups of pregnant rabbits, rats, and mice exposed to Amitrole, but only at doses high enough to also produce signs of toxicity in the mothers. Teratogenic effects in humans are unlikely in normal circumstances.

Mutagenic effects: One laboratory assay has shown Amitrole to a be weak mutagen. All other assays have shown no mutagenic effects. These data suggest that Amitrole is weakly or non-mutagenic.

Fate in humans and animals: Amitrole is rapidly and completely absorbed into the body through the gastrointestinal tract when eaten. It is excreted through the urine. The highest concentrations in all tissues generally occur within 1 hour after exposure.

SECTION 12

ECOLOGICAL INFORMATION

Environmental Toxicology: No data is available on this product. **Amitrole:** Fish LC₅₀ (96hr) > 1000 mg/L (Rainbow trout). Algae 24 hour EC₅₀ = 2.3 mg/L. Bird acute LD₅₀ = > 2150 mg/kg (Bobwhite quail). Aquatic invertebrates EC₅₀ (48hr) = 6.1 mg/L (*Daphnia magna*). Shrimp LC₅₀ (96hr) = 2.8 mg/L (*Americamysis bahia*). Aquatic plants EC₅₀ = 2.5 mg/L (*Lemna gibba*). Honey bees Acute contact LD₅₀ (48 hr) > 100 µg/bee. Acute 14 day LC₅₀ > 448 mg/kg. **Ammonium Thiocyanate:** Fish LC₅₀ (96hr) = 100 mg/L (Fathead minnow). Aquatic invertebrates EC₅₀ (48hr) = 170 mg/L (*Daphnia magna*).

Environmental Fate: Amitrole: The bioconcentration potential is low. Half life in soil is typically 14 days. **Ammonium Thiocyanate:** Toxicity to fish static test LC_{50} (96 hr) = 65 mg/L (Rainbow trout). Aquatic invertebrates EC_{50} (48 hr) = 3.56 mg/L (*Daphnia magna*). Toxicity to algae static test EC_{50} (72 hr) = 116 mg/L (*Selenastrum capricornutum*).

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DISPOSAL CONSIDERATIONS

Issued: March 2018

Spills and Disposal: Persons involved in cleanup require complete skin protection - see Section 8. In case of spillage, contain and absorb spilled material with absorbent material such as clay, sand or cat litter and dispose of waste in accordance with the requirements of Local or State Waste Management Authorities. Keep out animals and unprotected persons. Keep material out of streams and sewers.

If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals (ChemClear®).

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 not classified as a Dangerous Good under the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Marine and Air Transport: Apparent Troller Herbicide is not classified as a Dangerous Good according to the International Maritime Dangerous Goods (IMDG) Code and the International Air Transport Association (IATA).

SECTION 15

REGULATORY INFORMATION

Under the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP), this product is a Schedule 5 poison.

This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 85542.

This product is classified as a Hazardous Substance under the criteria of Safe Work Australia. Xn: harmful.

This product is not classified as a Dangerous Good.

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: 15 March 2018. Valid for 5 years till 15 March 2023. (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.

NOHSC: National Occupational Health and Safety Commission.

LD₅₀: 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.

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SECTION 16 OTHER INFORMATION (Continued)

Safe Work Australia: Formally known as Australian Safety & Compensation Council (ASCC) which was formally known as the National Occupational Health & Safety Commission

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(NOHSC).

References

"Search Hazardous Substances". Safe Work Australia website. (2018).

- 2. "Approved Criteria for Classifying Hazardous Substances" 3rd Ed. NOHSC Australia. [NOHSC:1008 (2004)]. October 2004.
- 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

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