SAFETY DATA SHEET

SECTION 1

IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Apparent Propyzamide 500 WG Herbicide

Other Names: Propyzamide, Group D Herbicide.

Use: Herbicide for the control of certain grasses and broadleaf weeds.

Company: Apparent Pty Ltd

Address: Suite G.08, 762 Toorak Road, Hawthorn East, Vic. 3123.

PO Box 3092, Cotham PO, Kew, Vic 3101

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

Email: enquiries@apparentag.com.au

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.

GHS Classification:

Skin Corrosion/Irritation: Category 2 Carcinogenicity: Category 2

Eye Damage/Irritation Category 2B

Hazardous to the Aquatic Environment - Acute Hazard: Category 1 Hazardous to the Aquatic Environment - Long Term Hazard: Category 4

Hazard statement:

H315 Causes skin irritation.

H320 Causes eye irritation.

H351 Suspected of causing cancer.

H400 Very toxic to aquatic life.

H413 May cause long lasting harmful effects to aquatic life.

Signal Word: WARNING

Precautionary Statements:

Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P264 Wash (hands, arms and face) thoroughly after handling.

P273 Avoid release to the environment.

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

P281 Use personal protective equipment as required.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P308 + P313 IF exposed or concerned: Get medical advice/ attention:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment see Safety Directions on the product label.

P332 + P313 If skin irritation occurs: Get medical advice/attention.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P362 Take off contaminated clothing and Wash before reuse.

P391 Collect spillage.

Issued September 2015 Page 1 of 6

SECTION 2 HAZARDS IDENTIFICATION (Continued)

Storage and Disposal:

P405 Store locked up.

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

Pictograms:







Issued: September 2016

SECTION 3

COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

CHEMICALCAS NUMBERPROPORTIONPropyzamide23950-58-5500 g/kgOther ingredients determined not to be hazardousBalance

SECTION 4

FIRST AID MEASURES

FIRST AID

Ingestion: If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia

13 11 26. If swallowed, do not induce vomiting. Wash mouth out with water and give

water to drink.

Eye contact: If in eyes, gently brush granules away immediately, and rinse with clean water until

chemical is removed. Seek medical advice. Ensure irrigation under eyelids by

occasionally lifting them. Do not try to remove contact lenses unless trained.

Skin contact: If on skin gently brush granules away. Wash skin with soap and water. If irritation

occurs and persists, seek medical advice. Launder contaminated clothing before re-

use.

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

advice. Not expected to be a significant route of exposure.

Advice to Doctor: Treat symptomatically.

SECTION 5

FIRE FIGHTING MEASURES

Specific Hazard: Combustible solid which burns but propagates flame with difficulty. This product, if dust is scattered, may form flammable or explosive dust clouds in air.

Extinguishing media: Alcohol resistant foam, CO₂ or dry chemical. Soft stream water fog if no alternatives. Do not scatter spilled material with high pressure water jets. Contain all runoff.

Hazards from combustion products: On burning will emit toxic and irritant fumes. Fire will produce black smoke containing hazardous products of combustion.

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: In the event of a major spill, prevent spillage from entering drains or water courses. Isolate and post spill area. Keep out unprotected persons and animals. Wear cotton overalls buttoned to the neck and wrist, washable hat and elbow length PVC gloves and disposable dust mask. Large spills should be dyked or covered to prevent dispersal. If possible, granules may be recovered and used for their intended use. Vacuum shovel or pump 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.

Apparent Pty Ltd Page 2 of 6

SECTION 6 ACCIDENTAL RELEASE MEASURES (Continued)

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.

This product is a herbicide and spills can damage crops, pastures and desirable vegetation. Prevent from entering drains, waterways or sewers. Use earthen bunds or absorbent bunding to prevent spreading of spillage.

SECTION 7

HANDLING AND STORAGE

Issued: September 2016

Precautions for Safe Handling: Ensure containers are kept closed until using product. Will irritate the eyes and skin. Avoid contact with eyes and skin. Avoid inhaling the dust. When preparing the spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist, washable hat and elbow length PVC gloves. After use, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

Conditions for Safe Storage: Keep out of reach of children. Store in the closed, original container in a dry, cool, well-ventilated area, out of direct sunlight. DO NOT store near food, feedstuffs, fertilisers or seed. Do not re-use container or dispose of undiluted chemicals on-site. This product is a Schedule 5 Poison (S5) and must be stored, transported and sold in accordance with the relevant Health Department regulations.

SECTION 8

EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines: No exposure standard for this product has been established by Safe Work Australia.

Biological Limit Values:

No biological limit allocated.

Engineering controls:

Keep containers closed when not in use. No special engineering controls are required, however make sure that the work environment remains clean and that dust and vapours are minimised.

Personal Protective Equipment (PPE):

<u>General</u>: When preparing the spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist, washable hat and elbow length PVC gloves. After use, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

<u>Personal Hygiene</u>: Will irritate the eyes and skin. Avoid contact with eyes and skin. Avoid inhaling the dust. 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 or off-white coloured granules.

Odour: No odour.

Boiling point: No data available. Freezing point: No data available. Bulk density: No data available.

Solubility in Water: Product disperses in water.

pH: No data available.Flammability: Combustible solid.Flashpoint (°C): Not applicable.

Poisons Schedule: This product is a Schedule 5 (S5) poison.

Formulation type: Water Dispersible Granule (WG).

Apparent Pty Ltd Page 3 of 6

SECTION 10

STABILITY AND REACTIVITY

Issued: September 2016

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.

Incompatible materials: Strong acids, strong bases and strong oxidising agents.

Hazardous decomposition products: This product will decompose when burnt. On burning will produce black smoke containing toxic and irritating fumes. Do not breathe smoke or vapours generated.

Hazardous reactions: Polymerisation is unlikely.

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.

Potential Health Effects:

ACUTE EFFECTS

Swallowed: Acute Oral LD₅₀ (rat) > 5000 mg/kg (propyzamide). Accidental swallowing of small

amounts of this product is not expected to cause injury – low acute oral toxicity.

Eye: This product is an eye irritant. In addition, the granules can cause physical discomfort if

in the eye.

Skin: Low acute dermal toxicity. The dermal LD_{50} (rabbit) > 2000 mg/kg (propyzamide). May

cause slight skin irritation. May cause discomfort if contact is prolonged. Not a dermal

sensitiser.

Inhaled: Low acute inhalation toxicity. Acute inhalation LC₅₀ > 5 mg/L/4hr (propyzamide). A

Long Term Exposure:

Chronic toxicity: When dogs were fed a diet containing Propyzamide for 3 months, decreases in weight gain and food consumption, changes in blood chemistry, and increased liver weights were observed at doses of 15 mg/kg/day. In a study in rats over 3 months, similar effects were seen at doses of over 10 mg/kg/day, and changes in thyroid, adrenal, and pituitary function were observed at 50 mg/kg/day. In a 2-year feeding study in dogs, the addition of Propyzamide to the diet at doses up to 7.5 mg/kg/day caused no adverse health effects at any of the doses tested.

Reproductive effects: It is unlikely that Propyzamide will have reproductive effects except at doses high enough to cause maternal toxicity.

Teratogenic effects: The evidence suggests Propyzamide is not teratogenic.

Mutagenic effects: Mutagenicity tests on bacteria, mammalian cell cultures, and live animals have been negative. It appears Propyzamide is not mutagenic.

Carcinogenic effects: Propyzamide caused liver tumours in mice after 2 years at doses of 10 mg/kg/day and above. In rats, doses of 50 mg/kg/day and above produced changes in ovary and liver structure and function, as well as thyroid and testicular effects. These data suggest that Propyzamide may have carcinogenic activity at sufficient doses. Worksafe Australia has classified propyzamide in the occupational environment as a Carcinogen Category 3 substance. This means that the substance is not classifiable as to carcinogenicity to humans.

SECTION 12

ECOLOGICAL INFORMATION

Environmental Toxicology: Propyzamide is practically non-toxic to birds. The oral LD $_{50}$ Japanese quail = 8700 mg/kg, and greater than 14,000 mg/kg in mallard ducks. The 8-day dietary LC $_{50}$ in bobwhite quail and mallard ducks is greater than 10,000 ppm. Propyzamide is practically non-toxic to warm water fish and slightly toxic to cold-water fish. The 96-hour LC $_{50}$ for Propyzamide = 100 mg/L in bluegill sunfish, 72 mg/L in rainbow trout, 350 mg/L in goldfish, 204 mg/L in harlequin fish, and 150 mg/L in guppies.

Apparent Pty Ltd Page 4 of 6

SECTION 12 ECOLOGICAL INFORMATION (Continued)

The 48-hour LC_{50} for Daphnia magna, a small freshwater crustacean, is greater than 5.6 mg/L. Propyzamide maybe moderately toxic to aquatic invertebrates. Propyzamide is non-toxic to honey bees.

Environmental Fate: Propyzamide is moderately persistent in most soils, with a reported average field half-life of 60 days. It is readily bound, or adsorbed, to most soils. Propyzamide is inactivated by soil organic matter and will not be effective on muck, peat, or other very high-organic content soils. Chemical degradation may be the main route of disappearance from the soil. Photodecomposition at the soil surface can also occur. Soil microorganisms carry out a moderate amount of Propyzamide breakdown. The herbicide is not active against common soil microorganisms. Volatilisation loss may be high under hot, dry conditions.

SECTION 13

DISPOSAL CONSIDERATIONS

Issued: September 2016

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. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals (ChemClear®). Dispose of drummed wastes, including decontamination solution in accordance with the requirements of Local or State Waste Management Authorities.

Disposal of empty containers: When the container is empty, shake any residual material into the spray tank. Shred and bury empty packaging in a local authority landfill. If no such landfill is available, bury the packaging 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.

SECTION 14

TRANSPORT INFORMATION

Transport: Apparent Propyzamide 500 WG Herbicide is not classified as a Dangerous Goods under the Australian Code for the Transport of Dangerous Goods by Road and Rail, the International Maritime Dangerous Goods (IMDG) Code or the International Air Transport Association (IATA).

SECTION 15

REGULATORY INFORMATION

Classified as a hazardous substance according to criteria of Safe Work Australia. (Xi).

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. 80689.

Product is not classified as a Dangerous Good according to the ADG Code (7th Ed), the International Maritime Dangerous Goods (IMDG) Code or 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: 23 September 2016. Valid for 5 years till 23 September 2021. (Revised to GHS).

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.

HSIS: Hazardous Substances Information System.

Lacrimation: The production, secretion, and shedding of tears.

Apparent Pty Ltd Page 5 of 6

SECTION 16 OTHER INFORMATION (Continued)

Lavage: A general term referring to cleaning or rinsing. Mutagen: An agent capable of producing a mutation.

Myotoxic: Having a toxic effect on muscle.

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

Issued: September 2016

Commission (NOHSC).

References

1. "Search Hazardous Substances". HSIS. Safe Work Australia website. (2016).

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

Apparent Pty Ltd Page 6 of 6