

SAFETY DATA SHEET

SECTION 1

IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **Apparent Quizalofop 200 EC Selective Herbicide**

Other Names: Quizalofop. Group A Herbicide.
Use: A selective agricultural emulsifiable concentrate grass herbicide.
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.
Combustible Liquid (C1).**

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

Flammable Liquids: Category 4
Aspiration Hazard: Category 1.
Toxic to Reproduction: Category 1B.
Skin Corrosion/Irritation: Category 2
Specific Target Organ Toxicity (Single Exposure): Category 3.
Eye Damage/Irritation: Category 2B.

Signal Word: DANGER

Hazard statements:

H227 Combustible Liquid.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H320 Causes eye irritation.
H335 May cause respiratory irritation.
H360 May damage fertility or the unborn child.

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 hot surfaces. – No smoking.
P261 Avoid breathing mist, vapours or spray.
P264 Wash (hands, arms and face) thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P281 Use personal protective equipment as required.

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.

SECTION 2 HAZARDS IDENTIFICATION (Continued)**Response (Continued):**

- P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308 + P313 IF exposed or concerned: Get medical advice/ attention:
 P312 Call a POISON CENTER or doctor/physician if you feel unwell.
 P321 Specific treatment (see Safety Directions on this label).
 P331 Do NOT induce vomiting.
- 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.
- P370 + P378 In case of fire: Use foam, carbon dioxide, or dry agent for extinction.

Storage:

- P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
- P403 + P235 Store in a well-ventilated place. Keep cool.
- 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
Quizalofop-P-Ethyl	100646-51-3	200 g/L
N-Methyl-Pyrrolidone	872-50-4	150 g/L
Hydrocarbon liquid	64742-94-5	592 g/L
Other ingredients determined not to be hazardous		Balance

Trace quantities of impurities are possible.

SECTION 4**FIRST AID MEASURES****FIRST AID**

- Ingestion:** If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 131 126. If swallowed do NOT induce vomiting. Wash mouth out with water and give water to drink.
- Eye contact:** Immediately hold eyes open and flood with clean water until chemical is removed. 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 and launder before re-use. Wash skin thoroughly with soap and water. 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:** The formulation contains a high level (74%) of liquid hydrocarbons that can cause severe pneumonitis or fatal pulmonary oedema if aspirated. Consideration should be given to gastric lavage with an endotracheal tube in place. Treat symptomatically. No specific antidote is available.

SECTION 5**FIRE FIGHTING MEASURES**

Specific Hazard: This product is a combustible liquid (C1). Flash point > 61°C. Eruption of containers is likely if confined at high temperatures. Intact containers exposed to excessive heat should be cooled with water to reduce drum pressure.

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

Hazards from combustion products: Will produce toxic and noxious vapours when burnt. There is a risk of containers exploding if large quantities are involved in a fire. Will not polymerise.

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 cotton overalls buttoned to the neck and wrist, a washable hat, and elbow-length PVC gloves. 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.

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. Thoroughly launder protective clothing before storage or re-use.

SECTION 7**HANDLING AND STORAGE**

Precautions for Safe Handling: No smoking, eating or drinking should be allowed where material is used or stored. Will irritate the eyes. Avoid contact with eyes. When opening the container, preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist, a washable hat, and elbow-length PVC gloves. If product on skin, immediately wash area with soap and water. Wash hands after use. After each day's use wash gloves and contaminated clothing.

Conditions for Safe Storage: Store product in the closed, original container in a cool, well ventilated area away from children, animals, food, feedstuffs, seed and fertilisers. Do not store for prolonged periods in direct sunlight. When storing, keep from contact with fertilisers, fungicides and seeds.

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. Do not cut or weld container. This product is a Schedule 6 Poison (S6) and must be stored 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 one ingredient has the following exposure guideline.

Atmospheric Contaminant	Exposure Standard (TWA)	STEL (mg/m ³)
N-methyl pyrrolidone	103 mg/m ³ (25 ppm)	309 mg/m ³ (75 ppm)

TWA = Time-weight Average STEL = Short term Exposure Limit

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)**Biological Limit Values:**

No biological limit allocated.

Engineering controls:

Use in ventilated areas. Keep containers closed when not in use. If natural ventilation is inadequate, supplement with fans.

Personal Protective Equipment (PPE):

General: When opening the container, preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist, a washable hat, and elbow-length PVC gloves. If product on skin, immediately wash area with soap and water. Wash hands after use. After each day's use wash gloves and contaminated clothing.

Personal Hygiene: Will irritate the eyes. Avoid contact with eyes. 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:	Dark amber coloured liquid.
Odour:	Characteristic odour.
Boiling point:	No data available.
Freezing point:	No data available.
Specific Gravity:	1.0 ± 0.1.
Solubility in Water:	Emulsifies in water. Not soluble.
pH:	No data available.
Flashpoint (°C):	> 61°C.
Flammability:	Combustible liquid (C1).
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: Avoid heat sources - combustible liquid.

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

Hazardous decomposition products: In a fire toxic and noxious gases are likely to be released.

Hazardous reactions: Material is not known to polymerize.

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: Very small amounts swallowed incidentally as a result of normal handling operations are not likely to cause significant injury; however, swallowing larger amounts may cause injury. Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

Eye: This product is severely 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. However, lengthy exposure or delayed treatment may cause permanent damage.

SECTION 11 TOXICOLOGICAL INFORMATION (Continued)

Skin: This product is irritating to the skin. The estimated dermal LD₅₀ > 2000 mg/kg.

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

Long Term Exposure: In animal studies, quizalofop has shown no evidence of mutagenic or genotoxic effects. Studies indicate that quizalofop is not carcinogenic. *Reproductive effects:* Although impaired reproductive function was determined in one study, the data was insufficient to draw conclusions regarding the likely reproductive effects of quizalofop-p-ethyl in animals, but suggest that effects on human reproduction are unlikely under normal circumstances.

Safe Work Australia has classified N-Methyl-Pyrrolidone in the occupational environment as a reproduction category 2 substance – which indicates that there is sufficient evidence to provide a strong presumption that human exposure to the substance may result in impaired fertility.

Organ toxicity: The liver is the target organ in rats and dogs and the testes may be a target organ in dogs.

SECTION 12 ECOLOGICAL INFORMATION

Environmental Toxicology: No information is available for the product. The following information refers to the active ingredient, quizalofop-p-ethyl. Quizalofop is practically non-toxic to birds. The oral LC₅₀ is greater than 2000 mg/kg for mallard ducks. The dietary LC₅₀ (8 day) is greater than 5,000 ppm for bobwhite quail and mallard ducks. Quizalofop is highly toxic to fish. The LC₅₀ ranges from 10.7 mg/L for rainbow trout to 0.46 mg/L in bluegill sunfish. Quizalofop is not toxic to bees. The contact LD₅₀ (48 hours) is greater than 100 mg/bee. DO NOT contaminate streams, rivers or water courses.

Environmental Fate: No information is available for the product. The following information refers to the active ingredient, quizalofop. The half-life of quizalofop in soil is 60 days depending on the soil. Not expected to leach significantly. Moderately to strongly sorbed to soils.

SECTION 13 DISPOSAL CONSIDERATIONS**Spills and Disposal:****1. After Spill or Accident:**

Clear area of all unprotected personnel. Wear cotton overalls buttoned to the neck and wrist, a washable hat, and elbow-length PVC gloves. Prevent spill from spreading or entering waterways, sewers or underground drains. Dispose of drummed waste and decontamination solution in accordance with the requirements of Local Authorities or State Waste Management Authorities. In rural areas contact ChemClear <http://www.chemclear.com.au> for help with collection of unwanted rural chemicals.

2. Disposal of empty containers after intended use:

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: Road & Rail Transport: This product is exempt from classification as a Dangerous Good in packs less than 3,000 kg or litres 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).

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

SECTION 14**TRANSPORT INFORMATION**

Marine and Air Transport: Apparent *Quizalofop 200 EC Selective Herbicide* is classified as 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 Quizalofop). Hazchem code ●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 under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 68393.

This product is classified as a Hazardous Substance under the criteria of Safe Work Australia. T: toxic. Xn: Harmful. Xi: Irritant.

This product is not classified as a Dangerous Good according to the ADG Code for packs less than 3000 litres (SP AU01) (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: 21 August 2016. Valid for 5 years till 21 August 2021. (Updated 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.

Lavage: A general term referring to cleaning or rinsing.

Mutagen: An agent capable of producing a mutation.

NOHSC: National Occupational Health and Safety Commission.

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