



Material Safety Data Sheet

Quizalofop 200 EC

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product trade name: 4Farmers Quizalofop-p-ethyl 200 Selective Herbicide.
Other names: QPE 200
Recommended use: For control of grass weeds in broadacre non-cereal crops, gardens, orchards, vineyards etc.
Company name & address: 4Farmers Pty. Ltd.
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2. HAZARDS IDENTIFICATION

Hazard classification: Hazardous according to the criteria of NOHSC. Dangerous goods.
Risk phrases: R20 Harmful by inhalation.
R22 Harmful if swallowed.
R41 Risk of serious damage to eyes.
R65 Harmful – may cause lung damage if swallowed.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment.
Safety phrases: S20/21 When using do not eat or drink/smoke
S23 Do not breathe spray.
S24/25 Avoid contact with skin/eyes
S29/35 Do not empty into drains/Dispose of material and container in a safe way
SUSDP Classification: S6
ADG Classification: Class 9 – Miscellaneous Dangerous Goods
[Environmentally Hazardous Substance, Liquid, N.O.S. (Quizalofop-P-Ethyl)]
UN Number: 3082

3. COMPOSITION

Substance	CAS Number	% content
Quizalofop-p-ethyl	100646-51-3	20
Aromatic hydrocarbons	64742-94-5	59
N-methyl pyrrolidone	872-50-4	15
Emulsifiers/surfactants		6

4. FIRST AID MEASURES

Skin contact: Remove contaminated clothing. Wash contaminated skin with soapy water. If skin irritation develops, get medical attention. Wash clothing thoroughly before re-use.
Eye contact: Rinse eye(s) with clean running water for 15 mins. Get medical attention.
Ingestion: Rinse mouth. Give water to drink if patient is conscious. DO NOT induce vomiting. If vomiting occurs ensure patient can breathe, then give water to drink. Get medical attention.
Inhalation: If symptoms of poisoning become evident, contact a Poisons Information Centre, or call a doctor at once. Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. DO NOT allow victim to move about unnecessarily. Symptoms of pulmonary oedema can be delayed up to 48 hours after exposure.
Advice to doctor: No specific antidote is known. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Carbon dioxide, dry chemical, foam, water fog.
Unsuitable extinguishing media: Water stream.



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Special hazards in fire: Product is classified as a C1 combustible product. There is no risk of an explosion from this product under normal circumstances. Combustion may release carbon dioxide, nitrogen oxides, and/or chlorine compounds.

Required special protective equipment for fire-fighters: Wear self contained breathing apparatus if in enclosed space.

Hazchem code: 2X.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures: Wear protective equipment to prevent skin and eyes being affected.
Evacuate unprotected and unnecessary personnel from area of spill.
If material is leaking from a container, stop the leak only if this can be done safely.
Prevent spillage entering drains or watercourse.

Methods for containment & cleanup: Vermiculite, Sand, Soil is a suitable absorbent, especially soils high in clay.
Soil can be used to form bunds to contain spillage.
Contaminated soil should be collected for disposal at a suitable landfill.
Contaminated area and tools should be washed down with hypochlorite bleach.
Personal protective equipment and clothing should be washed with soapy water.

7. HANDLING AND STORAGE

Handling: Keep away from food, drink, and animal feedstuff.
KEEP OUT OF REACH OF CHILDREN.
Wear suitable Personal protective equipment when handling and spraying.

Storage: Store in the original container in a dry, cool, ventilated, LOCKED area.
DO NOT store in prolonged sunlight.
DO NOT store with food, seed, or animal feedstuff.

8. EXPOSURE CONTROLS

National exposure standards: Exposure limits have not been established for any of the significant ingredients in this product.

Biological limit values: Quizalofop ADI = 0.01 mg/kgbw, NOEL = 1.25 mg/kgbw

Engineering measures: Use assisted ventilation in enclosed spaces if needed, especially storage areas.

Personal protection equipment:

- Eye/face protection: Goggles or glasses to AS 1366, AS/NZS1337
- Hand/skin protection: Overalls, PVC gloves and apron, face shield
- Respiratory protection: Should not be necessary under normal conditions. If spray mist may be encountered, a particulate filter to AS/NZS 1715 should be worn.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Pale brown mobile liquid.

Odour: Petroleum.

pH: Not applicable, non-aqueous formulation.

Vapour pressure: Will be that of solvent.

Vapour density: Will be that of solvent.

Boiling point/range: Solvent > 150 °C.

Melting/freezing point: << 0 °C.

Solubility: Fully miscible. Active will be insoluble micro-droplets

Specific gravity - density: 0.95 ± 0.02

Flashpoint: Not determined.

Explosive limits (air): Not determined.

Ignition temperature: Not determined.

10. STABILITY AND REACTIVITY

Chemical stability: Normally stable. Active may degrade in strong UV light.



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Conditions to avoid: Very high or low temperatures.
Materials to avoid: Strong oxidising agents.
Hazardous decomposition products: Oxides of nitrogen and chlorine. Burning with limited oxygen may produce carbon monoxide.
Hazardous reactions: Not known. Does not polymerise.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Quizalofop-p-ethyl is harmful by oral exposure.
Oral LD₅₀ values are 1210 to 1670 mg/kg in male rats, and 1182 to 1480 mg/kg in female rats, 1753 to 2350 mg/kg in male mice and 1805 to 2360 mg/kg in female mice.
Quizalofop-p-ethyl is not harmful by dermal exposure.
Dermal LD₅₀ values are greater than 2000 mg/kg for mice, rats, and rabbits. F
Reported 4-hour inhalation LC₅₀s values are 5.8 mg/L for technical quizalofop-p-ethyl and 75 mg/L for formulated product in rats.
Chronic toxicity: In a 1-year feeding study on dogs, doses of up to 10 mg/kg/day (the highest dose tested) caused no observed effects.
In a 90-day feeding study in rats, doses of 6.4 mg/kg/day and higher produced liver lesions and increased liver weight.
In a 2-year study of rats, doses of 5 mg/kg/day produced no observed effects.
Possible routes of exposure: Inhalation of spray mist is the most likely cause of exposure.
Range of effects. Excessive exposure may affect human health as follows:
Skin contact: Unlikely to have any effects if rinsed immediately. Prolonged contact may cause irritation and redness.
Eye contact: Unlikely to have any effects if rinsed immediately. Prolonged contact may likely to cause severe irritation and damage.
Inhalation/ingestion: Likely to cause nausea.
Dose/conc./conditions likely to cause injury: Several 10³s of millilitres.
Delayed effects if any:
Relevant negative data: Not known to be carcinogenic, mutagenic, or teratogenic.

12. ECOLOGICAL INFORMATION

Ecotoxicity:
Aquatic organisms: Fish – Acute I (LC₅₀ ≤ 1 mg/L)
Crustacea – Acute I (LC₅₀ ≤ 1 mg/L).
Algae – Acute I (EC₅₀ ≤ 1 mg/L).
Plants – Variable, from Acute (Poaceae) to non-toxic.
Flora: Highly toxic to plants of the Poaceae family. Relatively non-toxic to others.
Fauna: Non toxic.
Soil organisms: Non toxic to earthworms.
Bees: Non toxic.
Long term:
Ozone effects: None recorded.
Persistence/degradation: Hydrolyses rapidly in soil to quizalofop acid, then degrades with a half-life of weeks rather than months.
Mobility: Not readily leached.
Bioaccumulative potential: Unknown but probably low.

13. DISPOSAL CONSIDERATIONS

Product: Whenever possible, product should be used for its intended purpose, even if reclaimed from spillage (reclaimed product must be uncontaminated).
Containers: Whenever possible, follow directions given on container.
If not available, triple or pressure rinse plastic or metal containers before disposal. Recycle containers if possible (replace cap and return clean containers to recycler or designated collection point). Treat rinsings as for product above.
If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up



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for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

Sewage:

Do not dispose of product or rinsings into sewage systems or septic tanks.

14. TRANSPORT INFORMATION

UN Number: 3082
UN proper shipping name: Miscellaneous Dangerous Goods [Environmentally Hazardous Substance, Liquid, N.O.S. (Quizalofop-P-Ethyl)]
ADG Class & subsidiary risks: Class 9
ADG Packing Group: III
Special precautions: Do not store with foodstuffs.
Hazchem code: 2X. Is also a Combustible liquid Class C1 – flash point between 61 and 150 °C.
4Farmers does not anticipate that this product will be shipped by air or sea, nor be exported. Extra precautions may apply if such transport is undertaken.

15. REGULATORY INFORMATION

AICS: All of the significant ingredients in this formulation are to be found in the public AICS Database. This product is an Agricultural Chemical registered by the Agricultural Pesticides and Veterinary Medicines Authority.

16. OTHER INFORMATION

ADI – Allowable Daily Intake.
NOEL – No Observable Effect Level.
mg/kgbw – milligrams per kilogram of body weight.
TLV – Threshold limit value.
TWA – Time weighted average.
This MSDS prepared February 2008.