SAFETY DATA SHEET
LEOPARD HERBICIDE

Section 1: Identification of the Substance and Supplier

Product name : **LEOPARD HERBICIDE**
Chemical name of active Ingredient(s): 4-aryloxphenoxy propionic acid derivative
Supplier: **ADAMA New Zealand Limited**
Level1/19 Elms Street, Wakatu Estate, Stoke, Nelson, New Zealand
P.O. Box 1799, Nelson New Zealand.
Telephone +64 3 543 8275 Fax: +64 3 543 8274

Emergency Telephone: **0800 POISON (0800 764 766)**

Section 2: Hazards Identification

Hazard Classifications: 6.1D, 6.3A, 6.9B, 9.1B

Most important hazards:

TOXICITY
Warning -
May be harmful if swallowed, inhaled or absorbed through the skin.
May cause skin irritation.
May cause organ (liver) damage from repeated oral exposure at high doses.
Avoid contact with skin and inhalation of spray mist.

ECOTOXICITY
Toxic to aquatic organisms with long-lasting effects. Avoid contamination of any water supply with product or empty container.

Section 3. Composition/Information on Ingredients

Substance/preparation Preparation
Information on hazardous ingredients *

Common name	CAS No.	%	EC Number	Symbol	R-Phrases
Quizalofop-p-ethyl	100646-513-3	10			R65
Aromatic hydrocarbons	64742-94-5	81.2			
Other non hazardous Ingredients:	secret	to 100			

- ***Occupational Exposure Limit(s), if available, are listed in section 8***

Section 4: First-Aid Measures

First-aid measures:
Inhalation: First aid is not generally required, move the victim to fresh air immediately.
Ingestion: If swallowed do **NOT** induce vomiting. Wash mouth with water and contact the **National Poisons centre 0800 POISON (0800 764 766)**
Skin contact: Remove contaminated clothing, and flush skin and hair with running water.
Eye contact: Wash out immediately with water

Section 5: Fire-Fighting Measures

Extinguishing media
Suitable: Product is classified C1 combustible. Extinguishing media are carbon dioxide, dry chemical, foam, water fog. Water fog or fine spray is the preferred medium for large fires.
Hazardous thermal (de)composition products: There is a slight risk of explosion from this product, if commercial quantities are involved in a fire.
Protection of fire-fighters: When fighting fires involving significant quantities of this product, wear a splash suit complete with self contained breathing apparatus. Fire decomposition products from this product may be toxic if inhaled. Take appropriate measures.

Section 6: Accidental Release Measures

Personal precautions: Wear full protective clothing including eye/face mask, face shield and gauntlets. All skin areas should be covered.
Environmental precautions: Do not discharge into drains or the environment.
Methods for cleaning up: Absorb remainder in sand or other inert material. Dispose of in an authorized waste collecting point.

Section 7: Handling and Storage

Handling: Keep out of reach of children. Do not smoke, drink or eat while using.
Storage: This product is a scheduled poison**.** Store in original, unopened container in a cool, dry place, out of direct sunlight and away from stock feed or foodstuffs.

Section 8: Exposure Controls/Personal Protection

Engineering measures: No special ventilation requirements are normally necessary for this product. However, make sure that the work environment remains clean and that vapours and mists are minimized.
Hygiene measures: When handling do not eat, drink or smoke. Wash hands thoroughly after handling. Wash clothing separately before re-use.
Occupational Exposure Limits
Common name: **quizalop-p-ethyl**

Personal protective equipment:
Respiratory system: Respirator is recommended.
Skin and body: Wear suitable protective clothing.
Hands: Chemical resistant gloves. Impervious elbow-length gloves.
Eyes: Safety goggles or face shield.

Section 9: Physical and Chemical Properties

Physical state: Liquid
Colour: Clear amber
Odour: Mild odour
Boiling point: Not available
Vapour Density: No Data
Vapour pressure: No Data
Solubility in water: Emulsifiable
Octanol/water partition coefficient No Data
pH: No Data

Section 10: Stability and Reactivity

Stability: Product unlikely to decompose or react under normal storage conditions
Materials to avoid: strong acids, strong bases, strong oxidizing agents
Hazardous reactions :
Hazardous decomposition products: Carbon dioxide, and if combustible us incomplete, carbon monoxide and smoke. Nitrogen & its compounds, and under some circumstances, oxides of nitrogen. Occasionally cyanide gas. Hydrogen chloride gas, other compounds of chlorine. Nitrogen oxides.

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Section 11. Toxicological Information

Preparation

Quizalofop-p-ethyl

Acute toxicity - Oral:	LD_{50} 6600 mg/kg (male rats) 5700 mg/kg (Female rats)
Acute toxicity - Dermal:	LD_{50} (rabbits) >5000 mg/kg
Acute toxicity – Inhalation:	LC_{50} (rat) 5 to 12 mg/L (4 hours)
Skin irritation:	Non irritating (rabbits)
Eye irritation:	Slightly irritating (rabbit).
Sensitization :	Non sensitizer (guinea-pig)

Chronic toxicity:	No toxic effects observed in dogs given 10mg/kg/day
Carcinogenicity:	Not carcinogenic
Mutagenicity:	Not mutagenic
Reproduction toxicity:	None

Section 12: Ecological Information

Ecotoxicity:

Fish – highly to very highly toxic to fish

LC_{50} (96 hours)	bluegill sunfish	=	0.46 – 2.8 mg/L
	Rainbow trout	=	10.7 mg/L

Birds – practically nontoxic to birds

LD_{50} in both mallard and bobwhite quail	=	>5000 ppm
LD_{50} in mallard ducks	=	>2000 ppm

Common name: **quizalop-p-ethyl**
Mobility: Very low soil mobility
Persistence/degradability: Soil - Moderately persistent, with a half life of 60 days reported.
Breakdown of product is primarily via: high microbial activity

Bioaccumulative potential: **High toxic:** Fish
Practically Non toxic: Birds and bees

Section 13: Disposal Considerations

Methods of disposal: Container Disposal - Triple rinse empty container and add rinsate to spray tank. Burn in an appropriate incinerator, if circumstances such as wind direction permit. Otherwise crush or puncture and bury in a suitable landfill, or if appropriate, recycle. Avoid contamination of any water supply with product or empty container.

Section 14: Transport Information

UN Number	3082
Proper shipping name	Environmentally hazardous substance, Liquid, N.O.S, (quizalofop-p-ethyl)
DG Class	9
Packing Group	III
Hazchem Code	2X
Marine Pollutant	Yes
IER Guide page	47

National transport regulations: Do not carry this product on a passenger service vehicle.

Segregation: Check the land transport Rule Dangerous Goods 1999, Rule 45001 for additional information. Sea transport may require additional segregation.
Refer: NZS5433; Sea Segregation, or the International Maritime Dangerous Goods Code for details.

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Section 15: Regulatory Information

New Zealand Regulatory Information:

NZFSA Approval:

Registered pursuant to the ACVM Act 1997. No P7277.
See www.nzfsa.govt.nz/acvm for registration conditions.

Approved pursuant to the HSNO Act 1996, Approval No. HSR000354
See www.ermanz.govt.nz for registration conditions

HSNO Classifications: 6.1D, 6.3A, 6.9B, 9.1B

9.1B
Ecotoxic

Section 16: Other Information

Note: This product is a registered agricultural chemical and must be therefore be used in accordance with the container label directions. A comprehensive package of toxicological and environmental data for the active ingredients of this product has been submitted to the Government health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

The information contained in the Safety Data sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as a warranty or as a specification. The information relates only to the product specified and may not be suitable for combinations with other materials or in processes other than those specifically described herein.

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HISTORY

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