



## 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Donaghys Broadleaf Killer 2, 4-D  
Company: Donaghys Industries Ltd  
Address: 2 Nazareth Ave, PO Box 20449, Christchurch  
Telephone Number: 0800 942 006  
Emergency Telephone Number (24/7): National Poisons Centre 0800 POISON (764 766)  
Chemical family: Phenoxy acetic  
Manufacturer's Product Code:  
Use: Selective herbicide

## 2. HAZARDS IDENTIFICATION

Hazard classes:

- 6.1E Harmful-Keep out of reach of children
- 6.4A Harmful-Causes serious eye irritation
- 6.9A Toxic- may cause target organ damage from repeated oral exposure at high doses
- 9.1A Very toxic in aquatic environment
- 9.2A Very toxic in soil environment
- 9.3B Toxic to terrestrial vertebrates

ERMA NZ approval code: HSR000607

## 3. COMPOSITION

<u>Chemical Entity</u>	<u>CAS #</u>	<u>Proportion</u>
2,4 Dichlorophenoxyacetic acid, triethanolamine salt	002569-01-9	675g/L
Balance (Water, Inerts, pH adjusters and sequesterants)		<40%

## 4. FIRST AID INFORMATION

**Consult the National Poisons Information Center (0800 POISON or 0800 764 766) or a doctor in every case of suspected chemical poisoning. If medical advice is needed, have product container or label at hand. Never give fluids or induce vomiting if a patient is unconscious or convulsing regardless of cause of injury.**

**Ingestion:** If swallowed, call a poison centre or doctor / physician if you feel unwell. Drink several glasses of water, rinse mouth and seek medical attention. Causes damage to organs after repeated oral exposure at high doses. Do not induce vomiting or give anything by mouth to an unconscious person. If medical advice is needed have a product label or container at hand.

**Eye contact:** Causes serious eye irritation. Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing. If eye irritation persists: Get medical advice/attention.

### IN CASE OF EMERGENCY PHONE

**National Poisons Centre 03-474-4700 or 0800 POISON (0800-764-766)**

Ver: 0610



20/09/2007

## Donaghys Broadleaf Kill 2,4-D

Page 2 of 4

- Skin contact:** Remove contaminated clothing and wash skin with plenty of soap and water. Wash clothing before reuse. Get medical attention if symptoms occur.
- Inhalation:** May be harmful if inhaled. Do not breathe mist or spray. Call the National Poisons Centre (0800 764 766) if you feel unwell. If ill-effects occur, move to fresh air.
- Advice to Doctor:** Treat according to symptoms. No specific antidote.

### 5. FIRE FIGHTING MEASURES

- Flashpoint:** None (Tested to 200°C)
- Flammable limits:** Not applicable
- Extinguishing media:** Water fog
- Special fire fighting methods:** Noxious fumes produced under fire conditions. Do not allow runoff to enter drains. Contain contaminated extinguishing water. Wear positive pressure self-contained, breathing apparatus and full protective equipment.

### 6. ACCIDENTAL RELEASE MEASURES

- Spills and Disposal:** Avoid contact with the spilled material or contaminated surfaces. Absorb spilled material using soil, absorbent granules etc. Avoid creating dust. In case of large spills, dike area. Prevent from entering drains, waterways and sewers. Report large spills by contacting emergency services on 111 immediately. For final cleanup of premises a degreasing agent or detergent is advised. Dispose of all waste safely in an approved landfill.

### 7. HANDLING AND STORAGE

- Storage:** Keep out of reach of children. Store locked up in a well-ventilated area out of direct sunlight. Keep containers tightly closed, away from feed, food stuffs, fertilisers and seeds.
- Handling:** Read label before use. Wear eye protection. Do not breathe vapours/spray. Wash protective clothing and equipment after use. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. See product label for further handling precautions.

This substance is subject to a requirement for an emergency plan, secondary containment and signage, whenever it is held in quantities of 100 litres or more, either alone or in aggregate with other hazardous substances. See Hazardous substances (Emergency Management) Regulations 25 to 42.

#### IN CASE OF EMERGENCY PHONE

National Poisons Centre 03-474-4700 or 0800 POISON (0800-764-766)

Ver: 0610



## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

These precautions are suggested for conditions where the potential for exposure exists. Emergency conditions may require additional precautions.

Exposure Guideline:	2, 4-D Acid: 10mg/m <sup>3</sup> [NZ Workplace Exposure Standards]
Engineering Controls:	Use only with adequate ventilation.
Eye Protection:	Use chemical splash goggles where eye contact is likely.
Respiratory Protection:	No special protection needed
Protective Clothing:	Where contact is likely, wear chemical resistant gloves, e.g., nitrile or butyl, overalls closed at neck and wrist and chemical resistant footwear.
Hygiene Precautions:	Do not eat, drink or smoke whilst working with this product. Wash hands before breaks and after work. Wash protective clothing before re-use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear yellow liquid
Boiling Point:	186°C (solvent)
Vapor Pressure:	0.002Pa at 25°C (2,4-D ethylhexyl ester) 21mmHg at 38°C (solvent)
Vapor Density:	Not available
Density:	1.08-1.09 g/mL @20°C
Flash Point:	76°C (solvent)
Explosive Properties:	Not applicable
Decomposition Temperature:	Not available
Solubility in Water:	Miscible
pH:	7.5-9.5

## 10. STABILITY AND REACTIVITY

Conditions to avoid:	Avoid excessive heat. Stable at normal temperatures
Materials to avoid:	Acids and oxidizing agents
Hazardous decomposition products:	Hydrogen chloride, Nitrogen oxide under fire conditions
Polymerization:	Not known to occur

## 11. TOXICOLOGICAL INFORMATION

Eye:	May cause severe eye irritation with corneal injury, which may result in permanent impairment of vision, even blindness.
Acute Ingestion:	May cause damage to organs after repeated oral exposure at high doses.
Acute Inhalation:	May be harmful if inhaled.

### IN CASE OF EMERGENCY PHONE

**National Poisons Centre 03-474-4700 or 0800 POISON (0800-764-766)**

Ver: 0610



20/09/2007

## Donaghys Broadleaf Kill 2,4-D

Page 4 of 4

**Systemic Effects:** The following animal organs have been reported to be affected:  
Gastrointestinal tract, kidney, liver and muscular system.  
Observations in animals include gastrointestinal effects and vomiting.

**Oncological information:** 2, 4-D acid did not cause cancer in laboratory animals

### 12. ECOLOGICAL INFORMATION

**Aquatic Toxicity:** Highly toxic to plants including aquatic and algae. Aquatic organisms EC50 for most sensitive species tested (algae) = 0.21 mg/L.

**Soil Toxicity:** Soil residual activity is 3-4 months after an application of 3kg/hect. 2,4-D readily leaches in soils. High organic matter reduces leaching

**Terrestrial Vertebrates – Birds:** Low to moderate toxicity, Birds LD50 for most sensitive species tested = 377mg/kg

**Terrestrial Invertebrates - Bees:** Low to moderate toxicity

### 13. DISPOSAL INFORMATION

Dispose of product according to label. Triple rinse product container and add residues to spray tank. Burn container if conditions, particularly wind direction, permit or container may be crushed and buried in an approved landfill. Do not use container for any other purpose. Avoid contamination of waterways with chemical or empty container.

### 14. TRANSPORT INFORMATION

**Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S  
(CONTAINS 2, 4-D)

**UN Number:** 3082

**Class:** 9

**Packing Group:** III

**HAZCHEM code:** 2Z

### 15. REGULATORY INFORMATION

**ACVM Registration Number:** P7647  
See [www.nzfsa.govt.nz/acvm](http://www.nzfsa.govt.nz/acvm) for registration conditions

**ERMA New Zealand Approval Code:** HSR000607  
See [www.ermanz.govt.nz](http://www.ermanz.govt.nz) for approval conditions

The information contained herein is given in good faith. No warranty, expressed or implied is made. Any use of this information must be determined by the user to be in accordance with applicable Government laws and regulations. The information contained in this form is confidential and is submitted for your organisations internal use.

#### IN CASE OF EMERGENCY PHONE

National Poisons Centre 03-474-4700 or 0800 POISON (0800-764-766)

Ver: 0610