# **DONAGHYS**

# **Ethos**

For the control of Barley grass in pasture and weed control in ryegrass turf and red beet

Active Ingredient: Contains 500g/L Ethofumesate in the form of a suspension concentrate.

10 Litre

KEEP OUT OF REACH OF CHILDREN - WARNING/ECOTOXIC

# **INSTRUCTIONS - DONAGHYS ETHOS**

# WARNING/ECOTOXIC

#### SHAKE WELL REFORE LISE

### DIRECTIONS FOR USE - READ ENTIRE BOOKLET REFORE USING

#### GENERAL INFORMATION

Donaghys Ethos is an early post-emergence herbicide for the control of Barley grass in pasture, grass weeds in ryegrass turf and for pre-and early-emergence weed control in fodder beet and red beet.

BEWÄRE: APPLY THIS PRODUCT CAREFULLY. SPRAY DRIFT MAY CAUSE SERIOUS DAMAGE TO OTHER DESIRABLE PLANTS.

## MIXING

Use only clean water which is above 5°C temperature. Do not add surfactants. Add the required amount to the partly filled spray tank with the agitator operating. Complete filling tank with water and use immediately, maintaining anitation until soraving is complete.

### FOUIPMENT

Thorough and even application is essential. Apply only through properly calibrated boom spraying or handgun equipment. Do not use impact nozzles or broadcast nozzle cluster equipment.

Non-reinforced PVC tubing may soften or swell after prolonged contact.

Thoroughly clean sprayer after each use with water and detergent. Spray out

Thoroughly clean sprayer after each use with water and detergent. Spray out completely and rinse twice with clean water. Open tank lid and remove nozzles to allow access to air.

### WITHHOLDING PERIOD

REGULATORY STATEMENTS: It is an offence for users of this product to cause residues exceeding the relevant MRL in the Food Notice: Maximum Residue Levels for Agricultural Compounds.

Pasture - 28 days. Do not graze stock on treated areas for 28 days after spraving.

# IMPORTANT NOTICE - CONDITIONS OF SALE ACCEPTANCE AND USE OF THIS PRODUCT WILL BE DEEMED TO BE ACCEPTANCE OF THESE CONDITIONS OF SALE.

Results from the use of this product may be affected by factors beyond Donaghys control. These factors include but are not limited to mixing, use, time of application, weather, crop, crop lifecycle and resistance to the active ingredient, even though the product is reasonably fit for its stated purpose and label directions have been followed. Donaghys will replace any defective product free of charge, but to the extent permitted by law all other warranties, representations, conditions or obligations whether imposed or implied by law or otherwise, and the manufacturer's and supplier's liability for any indirect special or consequential losses or damages of any kind arising out of the supply and/or use of this product, including where it arises out of negligence, are expressly excluded. In ANY EVENT, TO THE EXTENT PERMITTED BY LAW, THE MANUFACTURER'S AND SUPPLIER'S LIABILITY ARISING OUT OF THE SUPPLY AND OR USE OF THIS PRODUCT IS LIMITED TO THE AMOUNT PAID FOR THE SPECIFIC PRODUCT.

UN number 3082 Packaging Group III Hazchem 3Z.

Environmentally Hazardous Substance, Liquid, N.O.S. (Contains Ethofumesate)
In a transport emergency call 111; Police or Fire Brigade. For 24 hours specialist advice in an emergency, call 0800 CHEMCALL (0800 243 622).

If additional safety information is required, refer to the Safety Data Sheet (SDS). For a copy of the SDS phone Donaghys Limited (0800 942 006).

Registered pursuant to the ACVM Act 1997, No.P9184

See www.foodsafety.govt.nz for registration conditions.

EPA Approval number HSR000826. See www.epa.govt.nz for approval conditions.

HAZARD CLASSIFICATIONS: 9.1B, 9.2A



REGISTERED TO AND MANUFACTURED BY:
DONAGHYS LTD.
16 SHEFFIELD CRESCENT, PO BOX 20 449, CHRISTCHURCH.
FREEPHONE: 0800 942 006, WWW.DONACHYS.COM





# **ETHOS APPLICATION RATES AND COMMENTS**

CROP:	RATE:	COMMENTS:
Barley grass control in pasture	Boom application: 4 L/ ha in 200-400 L of water. Gun application: 400 ml/ 100 L of water	For optimum results treat Barley grass growing in moist conditions at an early growth stage but after the main germination has occurred. The normal timing is between April and July following Autumn rain, but this will vary by season and region. Before treatment remove fallen debris and harrow large dung pats. Graze to 3-5 cm in height and allow to freshen up. Complete coverage of Barley grass is essential. Donaghys Ethos will not control barley grass in the green seed head stage. Do not apply after July. Raw organic matter on stock camps will reduce efficiency and follow up treatments may be required. N.B. In areas of dense Barley grass where the sward contains less than 5% ryegrass, ryegrass seed should be sown as soon as possible after spraying.
Grass weed control in Ryegrass turf	Boom application: 4L/ ha in 200-400 L of water. Gun application: 400 ml/ 100 L of water	Use only on ryegrass turf. To control Annual Poa follow the recommendations for Barley grass control in pasture above. Do not mow treated area for 4-5 days after spraying. To control summer germinating annual grasses apply treatment just prior to expected germination of weeds- usually September- October. A repeat treatment may be required after 6-8 weeks. Over-sow with ryegrass following treatment of densely weed infested areas.
Red Beet (Beetroot)	3-4 L/ ha in 200-300 L of water	Pre-sowing or pre-emergence: Apply before drilling or as soon as possible after drilling but before crop or weeds emergence. The seedbed should be firm, fine and moist. If moisture is limited, shallow (2-5 cm) incorporation of pre-sowing treatment may be preferred. Use the highest rate where moisture is limited or the seedbed is less than ideal. Post-emergence: Use 4 L/ ha on weeds from cotyledon to true 2 leaf stage. Notes:  1. Donaghys Ethos can be applied post-emergence following pre-emergence treatment with other herbicides.  2. Diemos EC based product may be applied post-emergence to crops previously treated with Donaghys Ethos pre-emergence.  3. Any crop may be sown 5 months after a single application of Donaghys Ethos at recommended rates. Ploughing to a minimum depth of 15 cm should precede seedbed preparation for following crops.
Fodder Beet	2-3 L/ ha in 200-300 L of water	Pre-emergence: Apply as soon as possible after drilling but before crop or weed emergence. The seed bed should be firm, fine and moist. Use the highest rate where moisture is limited or the seed is less than ideal.  Post-emergence: For fodder beet and sugar beet make 2 applications at 2L/ha in mixture with Diemos EC at 15.L/ha after the crop has 2 true leaves fully developed. The first application when weeds are from cotyledon to 2 true leaf stage and the second 10-14 days later.  Notes:  1. Donaghys Ethos can be applied post-emergence following pre-emergence treatment with other herbicides.  2. Diemos EC may be applied post-emergence to crops previously treated with Donaghys Ethos pre-emergence.  3. Any crop may be sown 5 months after a single application of Donaghys Ethos at recommended rates.  Ploughing to a minimum depth of 15 cm should precede seedbed preparation for following crops.

# WEED SUSCEPTIBILITY

SUSCEPTIBLE	INTERMEDIATE	RESISTANT
Annual Poa Chickweed Cleavers Fumitory Redroot Sow Thistle Spurrey Summer Grass Wild Portulaca	Annual Nettle* Barnyard Grass Black Nightshade Cornbind* Fathen Shepherds Purse Speedwells* Wild Oats Willow Weed	Dead Nettles Galinsoga Groundsel Perennial Weeds Ryegrasses Wild Radish

<sup>\*</sup>Controlled pre-emergence only

# ADDITIONAL INFORMATION

Donaghys Ethos is active pre-emergence through absorption by the emerging shoots of grass weeds and by the roots of broadleaved weeds soon after germination. Lack of soil moisture and the presence of raw organic matter will reduce or prevent pre-emergence activity.

Post-emergence treatments are initially absorbed through the foliage and later via root. Root absorption is also affected by moisture and organic matter.

Donaghys Ethos is very selective in ryegrass spp. in pasture and in turf but it will suppress clovers. Areas where clover production is important should not be treated with Donaghys Ethos as temporary suppression can be expected.

Donaghys Ethos is also selective in Red Beet pre and post-emergence. Post-emergence treatment may cause some distortion to crop foliage particularly early in the season, but this does not adversely affect yield.

Do not spray when rain is imminent or falling. Slight rain following or heavy dew prior to spraying will not reduce the effect providing it does not wash the product off the foliage.

### Protect concentrate from frost

# RESISTANCE MANAGEMENT

Group	15	Herbicide	

Donaghys Ethos contains ethofumesate, which belongs to the benzofuranes chemical family. Some naturally occuring weeds may become resistant when excessive use of the same herbicide occurs.

To prevent or delay the development of resistance, use in tank mixes and/or rotate use with herbicides with a different mode of action. Consult http://resistance.rapps.org/index/php for alternative modes of action and details of resistance management strategies (if any) for the crops listed on the label

# **DONAGHYS ETHOS**

# WARNING/ECOTOXIC

## HSNO HAZARD CLASSIFICATIONS: 9.1B. 9.2A

APPROVED HANDLER: This product must be used under the care of an approved handler when it is applied in a wide dispersive manner or used by a commercial contractor.

**RECORD KEEPING:** Records of use must be kept under certain circumstances - see The New Zealand Standards for Management of Agrichemicals (NZS8409) for details.

TOXICITY: Toxic to aquatic organisms with long-lasting effects. Avoid contamination of any water supply with product or empty container. Very toxic to soil environment. Avoid release to the environment.

HANDLING PRECAUTIONS: Keep out of reach of children. Do not eat, drink or smoke while using.

**EQUIPMENT:** Apply using accurately calibrated and maintained equipment in accordance with The New Zealand Standard for the Management of Agrichemicals (NZS8409).

STORAGE: Store in original, closed container in a cool, dry place, out of direct sunlight and away from stock feed or foodstuffs. As a Class 9 Substance with Ecotoxicity Classifications, storage of Donaghys Ethos herbicide must be carried out in such manner as to prevent contamination of waterways. It is recommended that The New Zealand Standard for the Management of Agrichemicals (NZS8409) is followed as a means of meeting the secondary containment provisions of the HSNO Emergency Management Regulations. See MSDS for further information.

**SHELF LIFE:** When stored appropriately this product should show no significant degradation for two years from the date of manufacture. Contact your supplier for further information about use of any product that is older than this.

PROTECTIVE CLOTHING: When mixing or applying wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow

length PVC gloves. Remove protective clothing and wash hands, arms and face thoroughly with soap and water before meals and after work.

SPILLS: Exclude all bystanders from the vicinity of the spill and prevent material from entering waterways. Wear appropriate protective clothing as in the precautions box of the label to clean up spills. Absorb spills with an inert (such as earth, sand or synthetic absorbent substance) material and place in waste containers. Wash area with water and alkaline detergent then absorb any remaining liquid with further inert material. Dispose of the waste safely in an approved landfill.

PRODUCT DISPOSAL: Preferably dispose of product by use. Otherwise dispose of product, packaging and waste at an approved landfill or equivalent facility in accordance with local, regional and national environmental regulations.

**CONTAINER DISPOSAL:** Donaghys is a member of Agrecovery Container Recycling programme. To recycle this container, please triple rinse and drop off to your local Agrecovery collection site.

For details on how to correctly prepare your container and collection sites please visit the Agrecovery website www.agrecovery.co.nz

### SAFFTY DATA SHFFT

A Safety Data Sheet for this product is available from Donaghys Limited on request.

# FIRST AID

IF SWALLOWED: Do NOT induce vomiting.

For advice, contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately.

**IF SPLASHED IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so.

IF SKIN OR HAIR CONTACT OCCURS: Remove contaminated clothing and flush skin and hair with running water.



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