

**DANGER: TOXIC, CORROSIVE, ECOTOXIC**  
**Keep Out of Reach of Children**  
**Read Label Before Use**



# Bow & Arrow NZ Herbicide


**Active ingredients:** Contains 20 g/L clopyralid present as the potassium salt, 15 g/L diflufenican and 300 g/L MCPA present as the potassium salt in the form of a suspension concentrate

**For the Control of Certain Broadleaf Weeds in Turf as specified in the Directions for Use**

Approved pursuant to the HSNO Act 1996, Approval Code HSR100816  
See [www.epa.govt.nz](http://www.epa.govt.nz) for approval conditions

**Ecotoxic herbicide. Not for use in home gardens.**

**IMPORTANT: READ THIS LEAFLET BEFORE USING THIS PRODUCT**

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**NZ Emergency Number: 0800 764 766 (0800 POISON)**





Harmful if swallowed



Chronic Toxic



Eye Corrosive



Ecotoxic

**HAZARDS**

**Danger** - Causes serious eye damage. Harmful if swallowed. Causes skin irritation. Causes damage to organs through prolonged or repeated exposure.

**Ecotoxic** - Very toxic to aquatic life with long lasting effects. Hazardous to soil organisms. Hazardous to terrestrial vertebrates.

**PCBU RESPONSIBILITIES:** A PCBU with management or control of work using this substance must ensure that every worker who uses, handles, manufactures, or stores this hazardous substance (including hazardous waste) is, before the worker is allowed to carry out or supervise work involving those substances, provided with adequate information, training and instruction. This includes the use of personal protective equipment to be used to minimise risks to the health and safety of workers when carrying out work using this substance.

**QUALIFICATIONS REQUIRED FOR APPLICATION OF CLASS 9 SUBSTANCES:** Anyone who mixes, loads, or applies this product, either by air or ground based methods, is required to be suitably qualified, or must receive guidance and, if required, assistance from a suitably qualified person. Refer to Schedule 10 of the Hazardous Substances (Hazardous Property Controls) notice 2017 for a list of suitable qualifications.

**RECORD KEEPING:** Where 3 kg or more of the substance is applied within 24 hours, in a place where the substance is likely to enter air or water and leave the application area, a PCBU with management or control of the substance must ensure that a written record is kept of each application of the substance. Refer to Part 4 Clause 48 of the Hazardous Substances (Hazardous Property Controls) notice 2017 for details of information that must be recorded.

**PRECAUTIONS**

Keep out of reach of children. Read label before use. Read safety data sheet before use.

DO NOT breathe mist or spray. Wash thoroughly after handling. DO NOT eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Turf Culture Bow & Arrow NZ Herbicide must not be used for the treatment of turf, where that turf will be mown and the clippings used for making compost; or where the clippings will be made available for collection for, or deposited at, a municipal green waste recycling depot.

**Storage:** Store in closed original container in a cool dry well-ventilated area out of direct sunlight, away from foodstuffs, fertilisers or seeds. Signage and secondary containment will be required at sites holding more than 1,000 L of product. Application and storage should be as described in the Management of Agrichemicals NZS8409. DO NOT carry on a passenger service vehicle.

**Container disposal:** Ensure the container is empty. Triple rinse empty container and add residue to spray tank. If recycling, replace cap and return clean containers to recycler or designated collection point (0800 247 326, [www.agrecovery.co.nz](http://www.agrecovery.co.nz)). Alternatively, if allowed under local Authority District Plans, burn if circumstances, especially wind direction permit, otherwise crush and bury in an approved local authority facility. DO NOT reuse this container for any other purpose.

**Product Disposal:** Disposal of this product only by using according to this label, or at an approved landfill or other approved facility.

Bow & Arrow NZ Herbicide must not be applied onto or into water.

Bow & Arrow NZ Herbicide must not be used on or around food or feed crops.

**DIRECTIONS FOR USE****Restrains**

DO NOT apply if weeds or turf are under stress or when frosts are imminent

DO NOT use if rain is expected within 4 hours.

DO NOT use clippings as mulch around other plants or for composting.

DO NOT use on golf and bowling greens.

DO NOT apply onto or into water.

Situation	Weeds Controlled	Rate	Critical Comments
Turf	Broadleaf weeds including;  White Clover ( <i>Trifolium repens</i> ) Plantain ( <i>Plantago lanceolata</i> ) Capeweed ( <i>Arctotheca calendula</i> ) Cat's ear ( <i>Hypochoeris radicata</i> ) Bindii (Jo-Jo, Onehunga) ( <i>Soliva sessilis</i> ) Cudweed ( <i>Gnaphalium</i> spp.) Creeping oxalis ( <i>Oxalis corniculata</i> )	5 L in 200 to 500 L water/ha	Apply to actively growing weeds. Transient discolouration may occur on Kikuyu and Carpet grass and Queensland Blue Couch. Varietal differences in certain Buffalo grasses (e.g. ST85) may produce more pronounced effects and it is recommended that small areas be tested for turf safety before large-scale application occurs. Avoid exceeding application rates through overlapping sprayed areas. Use a surfactant for difficult to wet weeds.

**DO NOT GRAZE TREATED TURF OR FEED TURF CLIPPINGS FROM ANY TREATED AREA TO POULTRY OR LIVESTOCK****GENERAL INSTRUCTIONS**

For best results the turf and weeds should be actively growing at the time of treatment.

Complete weed death may take up to 6 weeks. Faster results can be expected on smaller weeds.

Due to residual effects of diflufenican over-seeding treated areas within 3 months of application may inhibit establishment of the turf grass.

**MIXING**

Shake original container before use. Agitate continuously to ensure thorough mixing before and during application. Only mix sufficient chemical for each day's work.

**SURFACTANTS**

Surfactants (if used) should be added after Bow & Arrow NZ Herbicide and water are mixed, when the spray-tank is almost full.

**COMPATIBILITY**

No information is available that indicates physical compatibility with other products. Tank-mixing other products with Bow & Arrow NZ Herbicide cannot therefore be recommended. As formulations of other manufacturers' products are beyond the control of Turf Culture Pty Ltd, all mixtures should be tested prior to mixing commercial quantities.

**MOWING**

Avoid mowing during the 3 to 4 days preceding or following treatment.

**RE-ENTRY STATEMENT**

Do not allow entry into treated areas until the spray has dried. When prior entry is necessary wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.

**Manual Handling of Turf:** Hand-weeding and transplanting should not be performed before 2 weeks after spray application, unless workers wear overalls (or equivalent clothing) and chemical resistant gloves.

**INSTRUCTIONS TO AVOID SPRAY DRIFT**

DO NOT apply when wind speed is less than 3 or more than 20 kilometres per hour as measured at the application site.

DO NOT apply during surface temperature inversion conditions at the application site.

**APPLICATION RECORDS**

Users of this product **MUST make an accurate written record** of the details of each spray application within 24 hours following application and keep this record for a minimum of 2 years. The spray application details to be recorded are:

1. Date, with start and finish times of application
2. Location / address of area(s) sprayed
3. Full name of the product, product batch number (BN) and date of manufacture (DOM)
4. Amount of product used per hectare and the number of hectares treated
5. Turf species/situation and weed/pest
6. Wind speed and direction during application
7. Air temperature and relative humidity during application
8. Spray irrigation or rainfall after application, start time, duration and amount (mm)
9. Equipment used; nozzle brand, type, spray angle, operating pressure and total water volume applied per hectare
10. Name of person applying this product

(Additional record details may be required by the New Zealand Government where this product is used)

**CLEANING SPRAY EQUIPMENT**

THOROUGHLY CLEAN ALL APPLICATION EQUIPMENT AFTER USE. Rinse water should be discharged onto a designated disposal area or if unavailable onto unused land away from desirable plants and watercourses.

***Partial Cleaning*** (before spraying tolerant turf)

After using Bow & Arrow NZ Herbicide, empty the tank completely and drain the whole system. Thoroughly wash inside the tank with a pressure hose. Quarter fill the tank with clean water and circulate through the pump, line, hoses and nozzles. Drain and repeat procedure twice.

***Complete cleaning*** (before spraying susceptible plants)

After using Bow & Arrow NZ Herbicide empty the tank completely and drain the whole system. Thoroughly wash inside the tank with a pressure hose. Quarter fill the tank with clean water and circulate through the pump, line, hoses and nozzles, then drain.

Quarter fill the tank again and add an alkaline detergent at 500 mL/100 L water and circulate through the system for at least 15 minutes. Drain, remove filters and nozzles and clean separately. Rinse inside the tank thoroughly using a pressure hose and flush system with clean water.

**RESISTANT WEEDS WARNING**

GROUP	12	4	HERBICIDE
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Bow & Arrow NZ Herbicide is a member of the Phenyl-ethers, phenoxy and pyridine groups of herbicides. Bow & Arrow NZ Herbicide has the process of inhibitors of carotenoid biosynthesis and disruptor of cell growth modes of action. For weed resistance management Bow & Arrow NZ Herbicide is a group 12 and 4 herbicide.

Some naturally occurring weed biotypes resistant to Bow & Arrow NZ Herbicide and other Group 12 and 4 herbicides may exist through normal genetic variability in any weed population. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly.

These resistant weeds will not be controlled by Bow & Arrow NZ Herbicide or other Group 12 or 4 herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Turf Culture Pty Ltd accepts no liability for any losses that may result from the failure of Bow & Arrow NZ Herbicide to control resistant weeds.

**FIRST AID**

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Call a POISON CENTRE or doctor/physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs. Get medical advice/attention. Take off contaminated clothing and wash before re-use. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE (0800) 764 766 or doctor/physician. If medical advice is needed, have product container or label at hand.

**SPILLAGE**

Wear suitable protective clothing including face shield, impervious gloves and boots. Prevent the product or spilled material from entering water bodies. Absorb liquid spills with inert material such as earth or sand and place in waste containers. Wash area with water and absorb with further inert material. Dispose of safely.

**PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS**

DO NOT apply under weather conditions or from spraying equipment that may cause spray to drift onto nearby susceptible plants/crops, cropping lands or pastures. Spray drift from Bow & Arrow NZ Herbicide application may cause injury to herbaceous plants, vegetables, fruit crops, vines, ornamentals and trees.

**PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT**


Dangerous to fish and other aquatic life. DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

**SAFETY DATA SHEET**

If additional hazard or safety information is required, refer to the Safety Data Sheet (SDS), which is available from the supplier or from the manufacturer's website: [www.turfculture.co.nz](http://www.turfculture.co.nz)

**CONDITIONS OF SALE**

Bow & Arrow NZ Herbicide may only be sold to organisations employing a suitably qualified Approved Handler. The use of Bow & Arrow NZ Herbicide being beyond the control of the manufacturer, no warranty expressed or implied is given by Turf Culture Pty Ltd regarding its suitability, fitness or efficiency for any purpose for which it is used by the buyer, whether in accordance with the directions or not and Turf Culture Pty Ltd accepts with no responsibility for any consequences whatsoever resulting from the use of this product.

	<p>UN-3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains: clopyralid 2%, diflufenican 1.5% and MCPA 30%) PACKING GROUP III, HAZCHEM 2X CONTAIN SPILLAGE In a transport emergency dial 111, Police or Fire Brigade. For specialist advice in an emergency only, call 0800 764 766 (24 hours)</p>
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