

**WARNING**  
**KEEP OUT OF REACH OF CHILDREN**  
**COMBUSTIBLE LIQUID**  
**ECOTOXIC**

**ARROW<sup>®</sup>**  
**HERBICIDE**

**A selective post-emergent herbicide for  
annual and perennial grass control in  
broadleaf crops and forestry**

***READ THE ATTACHED BOOKLET COMPLETELY BEFORE MIXING OR  
APPLYING***

**ACTIVE INGREDIENT:** Contains 240 g/litre clethodim in the form of an emulsifiable concentrate

ADAMA New Zealand Limited  
Level 1, 19 Elms Street,  
Wakatu Estate  
Stoke 7011 New Zealand  
PO Box 1799  
Nelson 7040 New Zealand

NET CONTENTS  
**1, 5, 10L**

Telephone 03 543 8275  
Facsimile 03 543 8274

**Refer to booklet for full label instructions.**

**HAZARD CLASSIFICATIONS**

Classifications 3.1D, 6.1E, 6.3A, 6.4A ,6.9B, 9.1B, 9.2A



**ECOTOXIC**

**APPROVED HANDLER** - This product must be 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**

**Warning –**

**May be harmful if swallowed, inhaled or absorbed through the skin.**

**May cause skin and eye irritation.**

**May cause organ damage from repeated oral exposure at high doses.**

**Avoid eye and skin contact and avoid inhalation**

**FLAMMABILITY**

**Warning –**

**Combustible liquid – keep away from sources of ignition.**

**ECOTOXICITY**

**Toxic to aquatic organisms with long-lasting effects.** Avoid contamination of any water supply with product or empty container. **Very toxic to the soil 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 the original, unopened container in a cool, dry place, out of direct sunlight and away from stockfeed or foodstuffs. As a Class 9 Substance with Ecotoxicity Classifications, storage of Arrow Herbicide must be carried out in such a manner as to prevent contamination of waterways. It is recommended that The New Zealand Standard for the Management of Agrichemicals (NZS 8409:2004) is followed as a means of meeting the secondary containment provisions of the HSNO Emergency Management Regulations. See Safety Data Sheet 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 the use of any product that is older than this.

**Protective Clothing**

When mixing or applying wear appropriate protective clothing including cotton overalls buttoned to the neck and wrist, impervious, elbow-length gloves, and eye protection.

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

**Spillage**

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 this label to clean up spills. Absorb spills with an inert (such as vermiculite, 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

**Container Disposal**

Ensure container is empty. Triple rinse empty container and add rinsate to spray tank. Recycle empty container through Agrecovery (0800 247 326, [www.agrecovery.co.nz](http://www.agrecovery.co.nz)). Otherwise crush or puncture and bury in a suitable landfill. DO NOT reuse this container for any other purpose.

**Product disposal**

Dispose of this product only by using according to the label, or at an approved landfill or other approved facility.

**FIRST AID:**

If swallowed do NOT induce vomiting.

**For advice, contact the National Poisons Centre 0800 POISON (0800 764766) or a doctor immediately.**

If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with water.

If splashed in eyes, wash out immediately with water. If inhaled move the victim to fresh air immediately.

**CONDITIONS OF SALE**

ADAMA New Zealand Limited will not accept any responsibility whatsoever and howsoever arising and whether for consequential loss or otherwise in connection with the supply of these goods other than the responsibility for the merchantable quality of the goods and such responsibilities mandatorily imposed by the Statutes applicable to the sale and supply of these goods. To the extent allowed by such Statutes the liability of ADAMA New Zealand Limited is limited to the replacement of the goods or (at the option of ADAMA New Zealand Limited) the refund of the price paid and is conditional upon a claim being made in writing and where possible sufficient part of the goods to enable proper examination being returned to ADAMA New Zealand Limited within thirty days of delivery.

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www.adama.com

Registered pursuant to the ACVM Act 1997, No. P7342

See [www.nzfsa.govt.nz/acvm](http://www.nzfsa.govt.nz/acvm) for registration conditions

Approved pursuant to the HSNO Act 1996, Approval No. HSR002703

See [www.ermanz.govt.nz](http://www.ermanz.govt.nz) for approval controls

ADAMA® and Arrow® are trade marks of an Adama Group Company



**EMERGENCY RESPONSE**

(All hours)

Ring from anywhere in New Zealand

**0800 734 607**

In a Transport  
Emergency  
Phone 111  
Police or Fire

Batch Number:

Date of Manufacture:

*Bar code to be inserted*

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### **SAFETY DATA SHEET**

A Safety Data Sheet for this product is available from ADAMA New Zealand Limited on request. Call 03 543 8275.

**Beware: Apply this product carefully. Spray drift may cause serious damage to desirable plants. Ensure compliance with relevant regional air management plans. A strategy to minimise spray drift should be employed at all times when applying spray near aquatic environments.**

### **DIRECTIONS FOR USE:**

Apply an emulsifiable crop mineral oil at 2 litres/ha with all Arrow Herbicide treatments. For best results apply to young actively growing grass weeds. Do not apply to plants under stress from drought or waterlogging.

Use the lower rate on seedling grass weeds (2-5 leaf) or actively regenerating rhizomes and the higher rate on tillering plants or hardy rhizomatous grasses. On established sod-bound rhizomatous grasses in non-cultivated crops, suppression only may be obtained.

On crops which have been grazed, remove stock and allow grasses to freshen up for a few days (5-10 cm new growth)) before treating.

To minimise any possible crop damage, avoid spray overlaps.

Arrow Herbicide is considered to be rainfast if applied at least one hour before rainfall.

**White Clover Seed Crops:** Annual and perennial ryegrass. Apply 0.5 litres/ha plus 2 litres/ha crop oil after closing up.

**Legume feeds (e.g. lucerne, lupins, clover, lotus, trefoil):** Annual and perennial ryegrass and other grass weeds.

**Fodder Brassicas:** Apply when grass seedlings are small (typically 3-6 weeks after planting) and well before canopy closure.

**Forage herbs (e.g. plantain, chicory):** Annual and perennial ryegrass and other grass weeds. Do not apply Arrow Herbicide to plantain seed crops after flower heads are first visible in the base of the plants.

**Peas, Lentils, Oilseed Rape:** Wild Oats. Apply 0.25 litres/ha plus 2 litres/ha crop oil when the majority of wild oats are in the 2-5 leaf growth stage. A temporary effect on leaf colour and sheen may occur in peas. This has no adverse effect on crop vigour or yield.

**Orchard Crops:** Treat actively growing grass weeds as directed in the table. Apply as a directed spray to the base of the trees to avoid fruit contact.

**Vegetable Crops:** Treat actively growing grass weeds as recommended in the table. Do not apply more than 1 litre/ha on vegetable crops. Where no previous experience is available on a particular crop, treat a small area before applying widely.

NB: ASPARAGUS – do not apply during the cutting period.

**Forestry:** (Radiata pine, Macrocarpa, Douglas fir). Treat actively growing grass seedlings as directed in the table but do not exceed 1 litre Arrow Herbicide per hectare.

Tree Release: Spot Treatment: Use 3.5 ml Arrow Herbicide plus 10 ml emulsifiable crop mineral oil per litre of water. Apply 20 ml spray solution per square metre. To control broadleaf weeds and for residual weed control, apply in combination with Tyllanex Herbicide at recommended label rates.

<b>GRASSES CONTROLLED AND RECOMMENDED USE RATES</b>	
<b>Grass Species</b>	<b>Rates L/ha</b>
Wild oats, annual and perennial ryegrass, cocksfoot, barnyard grass, summergrass, floating sweet grass, canary grass, bristle grass, volunteer cereals	0.25 – 0.5
N.B. Turf ryegrass and tillered cereals will only be suppressed at these rates	
Annual poa, smooth witchgrass, soft brome, phalaris, tall fescue, prairie grass, riggut brome, brown top, barley grass	0.5 – 1.0
N.B. Chewings fescue, Yorkshire fog and hairgrass will be suppressed but not controlled at these rates	
Couch, paspalum, Indian doab	2.0 – 3.0

#### **WITHHOLDING PERIODS:**

**Vegetable crops – 5 weeks**

**Legume crops, forage herbs and fodder brassica crops – 3 weeks**

#### **COMPATIBILITY:**

Compatible with Tyllanex Herbicide and Versatill®. Otherwise do not apply in combination with other herbicides as efficacy may be reduced.

#### **MIXING:**

Partially fill the spray tank and add the correct amount of crop oil. Agitate and then add the Arrow Herbicide. Add the remainder of the water and agitate thoroughly before using. After standing, agitate spray solution well before reusing.

#### **APPLICATION:**

Apply with conventional spraying equipment using 100-400 litres water per hectare. Use nozzles and pressures that produce a droplet size of 150-300 micrometers VMD. Refer to the manufacturers recommendations for the appropriate nozzle and pressure combinations. Use the higher water rate for dense grass infestations.

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