

DANGER
KEEP OUT OF REACH OF CHILDREN



TOMAHAWK[®] HERBICIDE

GROUP 4 HERBICIDE

For the control of broadleaf weeds in apples, cereals and onions

READ THE ATTACHED BOOKLET COMPLETELY BEFORE MIXING OR APPLYING

Active Ingredient:

Contains 200 g/L FLUROXYPYR as the methylheptyl ester in the form of an emulsifiable concentrate, also contains 638 g/L HYDROCARBON LIQUID

UN No:	3082
Class-primary	9
Packing group	III
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fluroxypyr)
Marine pollutant:	YES

Batch number:	NET CONTENTS: 1 L, 5 L, 10 L, 20 L
Date of Manufacture:	
Barcode to be inserted	

REFER TO BOOKLET FOR FULL LABEL INSTRUCTIONS.**DANGER**

Combustible liquid. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. Very toxic to aquatic life with long-lasting effects. Hazardous to soil organisms.

HANDLING PRECAUTIONS

Keep out of reach of children. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid breathing mist, vapours or spray. Only use outdoors or in a well-ventilated area. Avoid unintended release into the environment. Collect spillages.

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 ENVIRONMENTALLY HAZARDOUS 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 L 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.*

EQUIPMENT

A PCBU with management or control of work using this substance must ensure that equipment used to handle this substance retains the substance, without leakage, at all of the temperatures and pressures at which the equipment is to be used; and dispenses or applies the substance, without leakage, at a rate and in a manner that the equipment is designed for. The PCBU must ensure that the equipment is accompanied by documentation that is readily available and readily understandable about the use and maintenance of the equipment.

STORAGE

Store locked up in the original, tightly closed container in a well-ventilated, cool, dry place, out of direct sunlight and away from sources of ignition, stockfeed or foodstuffs. In case of fire use dry chemical, water spray, foam or carbon dioxide for extinction. Store in accordance with NZS 8409 Management of Agrichemicals. Secondary containment and emergency response plans are required where 100 L or more of this product are stored. Refer to the product SDS for further information.

TRANSPORT

Do not carry packs greater than 10 L of this product on a passenger service vehicle.

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.

PERSONAL PROTECTION

When mixing or applying wear appropriate protective clothing including cotton overalls buttoned to the neck and wrist, impervious, elbow-length gloves, chemical resistant boots 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 personal protection section of this label to clean up spills. Absorb spills with an inert material (such as vermiculite, earth, sand or synthetic absorbent substance) 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.

DISPOSAL

Container Disposal - Triple rinse empty container and add rinsate to spray tank. Submit clean empty container to an Agrecovery® depot for recycling. Alternatively, puncture and bury in a suitable landfill. Avoid contamination of any water supply with product or empty container.

Product Disposal - Dispose of this product only by using according to the label, or through the Agrecovery® Chemical Recovery service or other approved facility.

Do not burn product or container.

SAFETY DATA SHEET

A safety data sheet for this product is available at www.adama.com.

FIRST AID

If medical advice is needed have product container or label at hand.

IF SWALLOWED: Do NOT induce vomiting. Immediately call a POISON CENTRE (0800 764 766) or doctor.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POSION CENTRE (0800 764 766) or doctor if you feel unwell.

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.



ADAMA

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See www.foodsafety.govt.nz for registration conditions

Approved pursuant to the HSNO Act 1996, Approval No. HSR101520
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Tomahawk is a registered trademark 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

DIRECTIONS FOR USE

TAKE ALL REASONABLE STEPS TO ENSURE THAT THE SUBSTANCE DOES NOT CAUSE ANY SIGNIFICANT ADVERSE EFFECTS TO THE ENVIRONMENT BEYOND THE APPLICATION AREA.

EPA Controls:

- Do not apply directly into or onto water;
- This substance must be applied by ground-based methods only;
- DO NOT apply when wind speeds are less than 3 km/hr or more than 20 km/hr as measured at the application site;
- When used on cereals and apples, the following is applicable:
 - Maximum number of applications per year is one;
 - Maximum application rate is 400 g fluroxypyr/ha (equivalent to 2 L of TOMAHAWK HERBICIDE applied per hectare);
- When used on onions, the following is applicable:
 - Maximum number of applications per year is four;
 - Minimum interval between applications is seven days;
 - Maximum application rate is 68 g fluroxypyr/ha (equivalent to 340 mL of TOMAHAWK HERBICIDE applied per hectare);

CEREALS

TOMAHAWK HERBICIDE is a selective herbicide for the control of many broadleaf weeds in wheat, barley and oats. Apply from the 3 leaf stage of the crop to booting (flag leaf) growth stage. Do not spray cereals undersown with clover or lucerne.

WEEDS	RATE	COMMENTS
Black nightshade Docks (seedling)	0.75 L/ha	Weeds should be at the 2-6 leaf stage.
Field chickweed	1 L/ha	Apply before flowering.
Cleavers	1.25 L/ha	Apply at the 2–4 whorl stage. Application may also be made to cleavers at advanced growth stages to achieve knockdown.
Wireweed Cornbind Field madder	1.25 L/ha	Apply to wireweed and cornbind at the 2–6 leaf growth stage. Apply to field madder before flowering.
Volunteer potato	2 L/ha	Suppression only. Apply when volunteer potatoes are 10–20 cm in height. Level of control will vary according to potato vigour, variety and crop competition.

The addition of an MCPA herbicide to TOMAHAWK HERBICIDE will broaden the weed spectrum for control of fathen, hedge mustard, wild turnip, shepherd's purse and nettle and will improve the control of wireweed. Refer to the MCPA label for application timing.

APPLES

TOMAHAWK HERBICIDE broadens the activity of glyphosate against certain broadleaf weeds in orchards. Refer to table below for use directions. Applications should be directed to the ground ensuring contact is not made with any green bark, suckers, foliage or fruit of the tree. Do not apply to trees less than 3 years old. Refer to glyphosate label for use rates for weeds not listed below, general recommendations and precautions relating to that product.

WEEDS	RATE	COMMENTS
White clover	1.5 L/ha	Add Boost Penetrant at 100 mL/100 L spray mix

WEEDS	RATE	COMMENTS
Docks	1.5 L/ha	Apply TOMAHAWK HERBICIDE in mixture with 2 L/ha glyphosate (360 g/L formulation) and Boost Penetrant at 100 mL/100 L spray mix.
Large flowered mallow Creeping mallow	2 L/ha	Apply TOMAHAWK HERBICIDE in mixture with 3 L/ha glyphosate (360 g/L formulation) and Boost Penetrant at 100 mL/100 L spray mix.

ONIONS

The combination of TOMAHAWK HERBICIDE and IOTRIL HERBICIDE should be used as a low-dose, repetitive treatment regime. Treated weeds distort and collapse showing severe wilting and leaf scorch and often exhibit excessive new root growth. If follow-up treatments are not made within 10 days, these weeds will recover and grow on normally after the initial check. Leaf scorching increases with each successive application until the weed is totally desiccated. The effect of TOMAHAWK HERBICIDE and IOTRIL HERBICIDE is accumulative in the weed giving a growth regulator effect together with a foliar scorch, inhibiting the ability of the weed to grow new leaves and recover from the scorching.

Apply only to onions from the 2 leaf stage onwards. Best control will be achieved on small weeds. Do not apply if rain is expected within 1 hour. Under hot dry conditions, some light leaf scorch and wilting of the crop can occur, but these effects are temporary. If possible, avoid spraying in the heat of the day.

Apply a maximum of four applications. Apply in sufficient water to achieve total coverage. Full coverage is essential to obtain best results.

WEEDS	RATE	COMMENTS
Cleavers, Californian thistle (suppression), red clover (small), docks (seedling), white clover (small), wireweed	240-340 mL/ha + 360-510 mL/ha IOTRIL HERBICIDE	Apply up to four sprays at 7-10 day intervals in onions from the 2 true leaf stage onwards. Use the higher rate if more scorch is required on the weeds.
Above weeds plus: Dandelion, groundsel, hawksbeard, rayless chamomile, plantain, annual poa (suppression), twincrest (seedling)	240-340 mL/ha + 360-510 mL/ha IOTRIL HERBICIDE + Bladex 90 WG 250 g/ha	The addition of Bladex 90 WG will increase speed of kill and broaden the spectrum. Repeat applications may be required on larger weeds at 7-10 day intervals. Do not apply to onions earlier than 2 true leaf. Do not add any surfactants and do not apply this mixture in combination with any other herbicides. CAUTION: This tank mixture may lead to phytotoxicity and has not been tested on all onion varieties. Monitor the crop following application and cease applications if excessive phytotoxicity is observed.
Volunteer potatoes (suppression)	240-340 mL/ha + 360-510 mL/ha IOTRIL HERBICIDE	Follow up 7-10 days later with a tank mixture of IOTRIL HERBICIDE at 300-450 mL/ha + BROWNDOWN adjuvant at 250-500 mL/ha. Use the low rate of all products if onions are only 2 true leaf or are very soft.

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.

WITHHOLDING PERIODS

Cereals: Do not graze failed crops for 7 days after application.
Apples: Do not harvest within 28 days of application.
Onions: 9 weeks.

MIXING

Half fill the spray tank with water and add the required quantity of TOMAHAWK HERBICIDE. When tank-mixing with other herbicides add the TOMAHAWK HERBICIDE last.

COMPATIBILITY

TOMAHAWK HERBICIDE is compatible with glyphosate, MCPA, 2,4-D-amine, clopyralid and most commonly used fungicides and insecticides.

APPLICATION

TOMAHAWK HERBICIDE can be applied using conventional ground spraying equipment. Flush equipment thoroughly with clean water after use.

Boom spraying: Use 100–200 L of water/ha in accordance with The New Zealand Standard for the Management of Agrichemicals (NSZ8409) as a medium quality spray. For late applications use 300 L of water/ha as medium quality spray to obtain more complete coverage. For onions apply in sufficient water to achieve total coverage of weeds.

RAINFALL

Do not apply if rain is likely to occur within two hours of application.

RESISTANCE MANAGEMENT

TOMAHAWK HERBICIDE contains the GROUP 4 pyridine carboxylic acid herbicide, fluroxypyr. Do not use another product containing a herbicide in the same group in conjunction with TOMAHAWK HERBICIDE, and where possible alternate the types of herbicides used within any one paddock over time. Herbicides from different group codes should either be used alternately or mixed together to prevent the numbers of resistant individuals building up. Since the occurrence of resistant weeds is difficult to detect prior to use, ADAMA New Zealand Ltd accepts no liability for losses that may result from the failure of this product to control resistant weeds. Contact your agronomist, ADAMA representative or specialist advisor for resistance management advice.