# **DANGER**KEEP OUT OF REACH OF CHILDREN



# TRIFLURALIN HERBICIDE

GROUP K1 HERBICIDE

A selective pre-plant pre-emergence soil incorporated herbicide for the long-lasting control of certain varieties of germinating annual grasses and broadleaf weeds in agricultural and horticultural crops

READ THE ATTACHED BOOKLET COMPLETELY BEFORE MIXING OR APPLYING

## **Active Ingredient:**

Contains 480 g/L TRIFLURALIN in the form of an emulsifiable concentrate, also contains 552 g/L HYDROCARBON LIQUID

ADAMA New Zealand Limited Level 1, 93 Bolt Road Tahunanui, Nelson 7011 PO Box 1799, Nelson 7040 New Zealand Telephone 03 543 8275 www.adama.com

**NET CONTENTS** 

5 L, 20 L, 110 L, 200 L, 1000 L

#### REFER TO BOOKLET FOR FULL LABEL INSTRUCTIONS.

#### HAZARD CLASSIFICATIONS: 6.1D, 6.3B, 6.4A, 6.5B, 6.9A, 9.1A, 9.2A







#### **PCBU RESPONSIBILITES**

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.

#### **DANGER**

Harmful if swallowed.

Causes mild skin irritation.

Causes eye irritation.

May cause an allergic skin reaction.

Causes damage to organs (blood and haematopoietic system) through prolonged or repeated exposure.

Very toxic to aquatic life with long lasting effects.

Very toxic to the soil environment.

#### HANDLING PRECAUTIONS

Keep out of reach of children.

Do not eat, drink or smoke while using.

Wash exposed skin thoroughly after handling.

Do not breathe spray mist or vapours.

Wear protective clothing as described in the personal protection section of this label.

Contaminated work clothing should not be allowed out of the workplace.

#### **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, unopened container in a cool, dry place, out of direct sunlight and away from stockfeed or foodstuffs.

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.

### 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, eye protection, impervious, elbow-length gloves and boots. Wash hands, arms and face

with soap and water before meals and after work. Wash protective clothing after use. **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.

#### **FIRST AID**

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

For advice or if you are exposed or feel unwell, contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately.

IF SWALLOWED: Rinse mouth. Call a POISON CENTRE or doctor if you feel unwell.

**IF ON SKIN:** Wash with plenty of soap and water. If skin irritation or rash occurs, get medical attention. Wash contaminated clothing before reuse.

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.

#### **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.



Registered to and distributed by: ADAMA New Zealand Limited Level 1, 93 Bolt Road Tahunanui, Nelson 7011 PO Box 1799, Nelson 7040 New Zealand Telephone 03 543 8275 www.adama.com

Registered pursuant to the ACVM Act 1997, No. P7297 See www.foodsafety.govt.nz for registration conditions

Approved pursuant to the HSNO Act 1996, Approval No. HSR000576 See www.epa.govt.nz for approval controls



### **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

# **DANGER** KEEP OUT OF REACH OF CHILDREN



# TRIFLURALIN HERBICIDE

**GROUP** 

K1 HERBICIDE

A selective pre-plant pre-emergence soil incorporated herbicide for the long-lasting control of certain varieties of germinating annual grasses and broadleaf weeds in agricultural and horticultural crops

READ THIS BOOKLET COMPLETELY BEFORE MIXING OR APPLYING

## **Active Ingredient:**

Contains 480 g/L TRIFLURALIN in the form of an emulsifiable concentrate, also contains 552 g/L HYDROCARBON LIQUID

ADAMA New Zealand Limited Level 1, 93 Bolt Road Tahunanui, Nelson 7011 PO Box 1799, Nelson 7040 New Zealand Telephone 03 543 8275 www.adama.com

**NET CONTENTS** 

5 L, 20 L, 110 L, 200 L, 1000 L

#### READ THIS BOOKLET COMPLETELY BEFORE MIXING OR APPLYING.

#### HAZARD CLASSIFICATIONS: 6.1D, 6.3B, 6.4A, 6.5B, 6.9A, 9.1A, 9.2A







#### **PCBU RESPONSIBILITES**

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.

#### **DANGER**

Harmful if swallowed.

Causes mild skin irritation.

Causes eve irritation.

May cause an allergic skin reaction.

Causes damage to organs (blood and haematopoietic system) through prolonged or repeated exposure.

Very toxic to aquatic life with long lasting effects.

Very toxic to the soil environment.

#### HANDLING PRECAUTIONS

Keep out of reach of children.

Do not eat, drink or smoke while using.

Wash exposed skin thoroughly after handling.

Do not breathe spray mist or vapours.

Wear protective clothing as described in the personal protection section of this label.

Contaminated work clothing should not be allowed out of the workplace.

#### **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, unopened container in a cool, dry place, out of direct sunlight and away from stockfeed or foodstuffs.

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.

#### 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, eye protection, impervious, elbow-length gloves and boots. Wash hands, arms and face with soap and water before meals and after work. Wash protective clothing after use.

#### **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.

#### **FIRST AID**

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

For advice or if you are exposed or feel unwell, contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately.

IF SWALLOWED: Rinse mouth. Call a POISON CENTRE or doctor if you feel unwell.

**IF ON SKIN:** Wash with plenty of soap and water. If skin irritation or rash occurs, get medical attention. Wash contaminated clothing before reuse.

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.

#### **SAFETY DATA SHEET**

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

#### PRODUCT INFORMATION

TRIFLURALIN HERBICIDE is a selective pre-plant soil incorporated herbicide for the long lasting control of certain varieties of germinating annual grasses and broadleaf weeds in agricultural and horticultural crops as show in directions for use.

TRIFLURALIN HERBICIDE controls weeds as they germinate, but will not control established weeds. The active ingredient of TRIFLURALIN HERBICIDE is broken down by ultra violet light, so it must be incorporated into the soil **immediately** after application.

#### **WEEDS CONTROLLED**

TRIFLURALIN HERBICIDE applied pre-planting or pre-transplanting prior to weed emergence in accordance with the directions on this label controls the following weeds:

GRASSES	BROADLEAF WEEL	BROADLEAF WEEDS		
Annual poa	Amaranth spp	Cornbind	Spurrey (Yarr)	
Barnyard grass	Bladder campion	Fathen	Wild portulaca	
Bristle grass	Catch fly	Purple amaranth	Wireweed	
Summer grass	Chickweed	Red dead-nettle	Yellow gromwell	
Witchgrass	Calandrinia	Redroot		
Wild oats*†	Cleavers*	Scarlet pimpernel		

<sup>&</sup>lt;sup>†</sup> For wild oats a minimum rate of 1.7 L/ha is required.

#### **WEEDS NOT CONTROLLED**

Black nightshade, clovers, fumitory, mallows, Shepherd's purse, storksbill, twin cress, wild turnip, willow weed, thistles and daisies.

#### **SOIL ORGANIC MATTER WARNING**

**Do not** use on soils with 9% or higher organic matter content, or peat type soils.

<sup>\*</sup> Seeds germinating below the zone of incorporated TRIFLURALIN HERBICIDE may not be controlled.

#### **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. OFF-TARGET DRIFT MAY CAUSE DAMAGE TO NON-TARGET PLANTS.

Do not apply onto or into water.

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.

CROP	RATE		CRITICAL COMMENTS	
	Up to 4% organic matter (sandy or light soils)*	5-8% organic matter (clay, silt or loam soils)*		
DRILLED CROPS Carrots, parsnips, celery, choumoellier, kale, rape, swedes, turnips, sunflower, haricot beans, lima beans, soybeans	1.7 L/ha	2.5 L/ha	Apply immediately before or up to 6 weeks prior to sowing.	
Barley	1.25–1.7 L/ha	1.7 L/ha	Apply 14 days prior to sowing unless conditions are favourable for germination when planting may immediately follow incorporation. Drill seed below the treated soil layer (at least 5 cm deep). Do not seed too deeply in loose soils.	
French beans, linseed, lucerne, oilseed rape	1.25-1.7 L/ha	1.7-2.1 L/ha	Apply immediately before planting where conditions are favourable for rapid germination. Apply at least 14 days pre-planting under cold, wet soil conditions.	
Peas (process and field crops)	1.25–1.7 L/ha	1.7–2.5 L/ha		
INTER-ROW ESTABLISHED CROPS Pumpkins, squash, melons, cucumbers	1.7 L/ha	2.5 L/ha	Apply post-emergence. Incorporate inter-row.	
TRANSPLANT CROPS Cabbage, cauliflower, Brussels sprouts, broccoli, celery, tomatoes, peppers	1.7 L/ha	2.5 L/ha	Apply immediately before or up to 6 weeks prior to transplanting.	

<sup>\*</sup>Soil texture is given only as an indicator to organic matter level. If in doubt, contact your representative of ADAMA New Zealand Limited.

#### **MIXING**

Partially fill the spray tank and add the correct amount of TRIFLURALIN HERBICIDE. Agitate thoroughly while filling and spraying. After a stoppage and before recommencing spraying the spray solution must be vigorously agitated to ensure it is well mixed.

#### APPLICATION AND INCORPORATION

The soil should be flat, free of trash and large clods and not excessively wet. Foreign material such as plant residues or stones on or in the soil can reduce herbicide effectiveness. TRIFLURALIN HERBICIDE should be evenly applied to the soil surface in a spray volume of 100-400 L of water/ha, at pressures of 200-300kPa. Avoid boom overlaps to minimise the risk of crop injury. Thorough incorporation is essential for weed control. Incorporation can be carried out as part of the normal seed bed preparation providing that the implements are used as per the following recommendations:

- 1. Power driven rotary implements set to cut to depth of 5-10 cm. Lely Roterra may be used only if the spray boom is mounted on the implement.
- 2. Tandem discs set to cut 8-15 cm deep and operated at a speed of not less than 6-10 kg/h.
- 3. Heavy spike or diamond harrows or Dutch harrows operated at 10-13 km/h. Trailing harrows must be weighted 20-30 kg per section. Chain harrows are **not recommended.**

A minimum of two workings in different directions (i.e. at 90° to each other) is essential (except with rotary hoe) for thorough incorporation. The soil surface should be left relatively clod free, i.e. max. clod size 4 cm diam. Shallow cultivation during the growth of the crop will not reduce weed control.

#### **CROP SAFETY**

TRIFLURALIN HERBICIDE applied according to directions and under normal growing conditions will not harm the treated crop. However seedling disease, cold weather, deep planting, excessive moisture, high salt concentration, or drought may weaken crop seedlings and increase the possibility of crop damage. Under these conditions, delayed crop development, or reduced yields may result. Sowing linseed deeper than 3 cm may result in some linseed stand reduction. Under prolonged dry conditions, or prolonged cold wet conditions, certain crops are susceptible to injury when planted in soil previously treated with TRIFLURALIN HERBICIDE. To avoid such injury, it is not advisable to plant sensitive grasses, such as ryegrass or wheat, for 12 months following TRIFLURALIN HERBICIDE application.

### **RESISTANCE MANAGEMENT**

TRIFLURANLIN HERBICIDE contains the GROUP K1 Dinitroaniline herbicide, trifluralin. To minimise the risk of resistance developing, use strictly in accordance with the label directions. Unless directed, do not use another product containing herbicides in the same groups in conjunction with TRIFLURALIN HERBICIDE. Where possible, herbicides from different groups should either be used alternately or mixed together to prevent the numbers of resistant individuals building up.

#### **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.



Registered to and distributed by: ADAMA New Zealand Limited Level 1, 93 Bolt Road Tahunanui, Nelson 7011 PO Box 1799, Nelson 7040 New Zealand Telephone 03 543 8275 www.adama.com

Registered pursuant to the ACVM Act 1997, No. P7297 See www.foodsafety.govt.nz for registration conditions

Approved pursuant to the HSNO Act 1996, Approval No. HSR000576 See www.epa.govt.nz for approval controls