

CAUTION

KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Nufarm
Archer[®]

Herbicide

ACTIVE CONSTITUENT: 300 g/L CLOPYRALID
present as the triisopropanolamine salt

GROUP  HERBICIDE

For control of a WIDE RANGE of BROADLEAF WEEDS in WHEAT, BARLEY, OATS, TRITICALE, CANOLA, PASTURES, FALLOW LAND, FORESTS and INDUSTRIAL SITUATIONS as specified in the directions for use.

**IMPORTANT: READ THE ATTACHED BOOKLET BEFORE
USING THIS PRODUCT.**

Contents: 5 Litres
10 Litres
20 Litres

Nufarm Australia Limited
ACN 004 377 780
103-105 Pipe Road
Laverton North Victoria 3026
Tel (03) 9282 1000
Fax (03) 9282 1001



® Archer is a registered trademark of Nufarm Australia Limited.

STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

SMALL SPILL MANAGEMENT

Wear appropriate clothing whilst cleaning up small spills, (see SAFETY DIRECTIONS). Apply absorbent material such as earth, sand or clay granules to the spill. Sweep up material for disposal when absorption is complete.

Dispose of the contaminated material in accordance with STATE and/or LOCAL REGULATIONS.

SAFETY DIRECTIONS

May irritate the eyes and skin. Avoid contact with eyes and skin. **DO NOT** inhale the spray mist.

When preparing the spray, wear elbow-length PVC gloves and a face shield. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

After each day's use, wash gloves and face shield.

FIRST AID

If poisoning occurs, contact a Doctor or Poisons Information Centre (Phone Australia 13 11 26).

MATERIAL SAFETY DATA SHEET

For further information refer to the Material Safety Data Sheet (MSDS).

CONDITIONS OF SALE

"Nufarm Australia Limited ('Nufarm') shall not be liable for any loss injury damage or death whether consequential or otherwise whatsoever or howsoever arising whether through negligence or otherwise in connection with the sale supply use or application of this product. The supply of this product is on the express condition that the purchaser does not rely on Nufarm's skill or judgment in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of Nufarm has any authority to add to or alter these conditions."

APVMA Approval No: 52139/5L/0207

APVMA Approval No: 52139/10L/0207

APVMA Approval No: 52139/20L/0207

In case of emergency: Phone 1800 033 498

Ask for shift supervisor. Toll free 24 hours.

Batch No:

Date of Manufacture:

CAUTION

KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Nufarm
Archer[®]

Herbicide

ACTIVE CONSTITUENT: 300 g/L CLOPYRALID
present as the triisopropanolamine salt

GROUP  HERBICIDE

For control of a WIDE RANGE of BROADLEAF WEEDS in WHEAT, BARLEY, OATS, TRITICALE, CANOLA, PASTURES, FALLOW LAND, FORESTS and INDUSTRIAL SITUATIONS as specified in the directions for use.

READ THOROUGHLY BEFORE USE.

Nufarm Australia Limited
ACN 004 377 780
103-105 Pipe Road
Laverton North Victoria 3026
Tel (03) 9282 1000
Fax (03) 9282 1001



APVMA Approval No.: 52139/0207

© Archer is a registered trademark of Nufarm Australia Limited.

1. CROPS, PASTURES AND FALLOW LAND**DIRECTIONS FOR USE:**

IT IS ESSENTIAL to select a rate appropriate to weed size. Best results will be obtained when weeds are actively growing at treatment.

RESTRAINTS:

DO NOT apply to weeds which may be stressed (inactive growth) due to prolonged periods of extreme heat or cold, moisture stress (water logging or drought) or previous herbicide treatment as reduced levels of control may result.

DO NOT spray if rain is likely within 3 hours.

DO NOT apply immediately before sowing susceptible crops, or sow susceptible crops into paddocks treated the previous year with Archer until after the required plantback period has elapsed (see PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS section).

DO NOT compost material from treated plants or crops before reading the PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS section.

Crop	Crop Stage	Weed	Weed Stage	Rate mL/ha	State	Critical Comments	
Barley Oats Triticale Wheat	Pre-sowing	Capeweed	Up to 8 leaf and maximum 10 cm diameter	150 plus knockdown herbicide	WA only	Pre-sowing: This rate should only be used in tank mixture with formulations of paraquat/diquat or glyphosate.	
	Post-sowing pre-emergence through to 3 leaf			150 plus Nufarm Flowable Diuron at 300 mL/ha or Diuron 900DF at 170g/ha		Post sowing pre-emergent to 3 leaf: This rate should only be used in tank mixture with Diuron for control of transplants.	
	Early post-emergence (2 leaf to jointing)			150		Early post-emergent: Weeds should be growing actively and not larger than 5 cm diameter.	
	4 to 5 leaf onwards		Capeweed Soldier thistle	Up to 10 cm diameter (4 to 8 leaf)	300	NSW, Vic, SA, Tas and WA only	Weeds should be young and actively growing. Weeds will become stunted and will not be competitive soon after application although final results may not show for some weeks. Faba beans and lupins will only be suppressed. Use 75 mL/ha rate only in combination with LVE MCPA .
			Volunteer chickpeas, lentils and safflower	Up to 6 leaf	250		
			Volunteer faba beans and lupins	Up to 4 leaf			
			Volunteer field peas	Maximum 10 cm high or 6 nodes	150 75 plus 700 mL/ha Nufarm LVE MCPA		
			Volunteer medics and seedling lucerne	Up to 8 leaf	150		
			Volunteer sub-clover	Up to 6 leaf			
			Volunteer vetch	Runners up to 10 cm maximum 16 leaf	100 75 plus 700 mL/ha Nufarm LVE MCPA		
Prickly lettuce			4 to 6 leaf and maximum 8 cm diameter	150 plus 700 mL/ha Nufarm LVE MCPA			
Thistles including: Nodding Saffron Scotch Slender Spear Stemless Variegated			Rosettes up to 10 cm maximum diameter	50 plus 1.0 L/ha Nufarm MCPA 500 or 50 plus 700 mL/ha Nufarm LVE MCPA	NSW, Vic, SA, Tas, WA and Qld only		
5 leaf to late tillering	Skeleton weed	5 to 15 cm rosettes	500 plus 1.0 L/ha Nufarm MCPA 500	NSW, Vic, SA and WA only	Weeds should be a minimum 5 cm in diameter, and growing actively. This rate will give control until harvest and substantially reduce weed numbers the following season.		

Crop	Crop Stage	Weed	Weed Stage	Rate mL/ha	State	Critical Comments
Canola	2 to 8 leaf	Capeweed Saffron thistle Skeleton weed Soldier thistle	Up to 10 cm diameter (4 to 8 leaf)	300	NSW, Vic, SA, Tas, WA and Qld only	Weeds should be young and actively growing. Weeds will become stunted and will not be competitive soon after application although final results may not show for some weeks. Skeleton weed will only be controlled until harvest. Faba beans and lupins will only be suppressed. For the control of annual grasses Archer may be tank mixed with Asset® Herbicide.
		Volunteer chickpeas, lentils and safflower	Up to 6 leaf	250		
		Volunteer faba beans and lupins	Up to 4 leaf	250		
		Volunteer field peas	Maximum 10 cm high or 6 nodes	150		
		Volunteer medics and seedling lucerne	Up to 8 leaf			
		Volunteer sub-clover	Up to 6 leaf			
		Volunteer vetch	Runners up to 10 cm maximum 16 leaf	100		
Pastures and fallow land	Post-emergence	Hardhead thistles (creeping knapweed, Russian knapweed)	Actively growing plants	Hand gun: 500 mL/100 L of water Boom spray: 2 or 4 L/ha	Vic only	NOTE: DO NOT USE ON LUCERNE. CLOVERS AND MEDICS WILL BE ELIMINATED FOR AT LEAST ONE YEAR. Victoria only: Use the lower rate only on light soils (sand and sandy loam) where a slightly lower degree of control is acceptable. Use the higher rate on all soil types where complete control is required. Addition of Spraymate Activator Surfactant at 125mL/100L is recommended for treatment of hardhead thistle. Spray between September and April on actively growing plants for effective control. Thorough coverage is essential. Apply in 200 to 250 L of water/ha. BOOM SPRAYING: Use the higher rates of Archer plus MCPA 500 on multicrowned plants or rosettes larger than 30 cm in diameter. Spraying may be done at any time during active growth, usually in early winter of spring. Avoid spraying during the dormant winter period or at any time when thistles are not actively growing. <i>Do not spray flowering thistles.</i> PRE-SPRAY MANAGEMENT: The pastures should be slightly grazed prior to spraying to reduce clover and grass cover and expose the smaller thistles to the spray. The grazed pastures should be left seven days to allow thistles to freshen prior to treatment. POST-TREATMENT MANAGEMENT: Response of thistles to treatment with the Archer plus MCPA 500 mixture will be slow compared to the standard treatments with Amicide 625 or MCPA 500. If possible delay grazing of sprayed thistles for 14 days after treatment. CLOVER DAMAGE: The Archer plus MCPA 500 mixture can be very damaging to subterranean clover. The lower rate is no more damaging than label rates of Amicide 625 or MCPA 500. The higher rate of the Archer plus MCPA mixture will reduce the clover component of the pasture for about two months. Clover recovery will be quicker during periods of active growth. HANDGUN (Spot spray): Treat from rosette stage to early flowering. Thorough spraying is necessary. DRENCHGUN: Apply 10 mL to rosette crown. To multicrown plants, apply 10 mL to each crown.
				Hand gun: 500 mL/100 L of water Boom spray: 4 L/ha	Qld only	
		Thistles including: Nodding Variegated Scotch Spear Slender Saffron	Rosette stage prior to stem elongation. Treat rosette stage prior to stem elongation	50 or 70 mL/ha plus 1 to 1.5 L Nufarm MCPA 500/ha Drench gun: 50 mL/1 L of water Hand gun: 250 mL/100 L of water	NSW, Vic, Tas, SA and Qld only	

Crop	Crop Stage	Weed	Weed Stage	Rate mL/ha	State	Critical Comments
Pastures and fallow land (cont'd)	Post-emergence	Nodding thistle	Rosettes up to 20 cm diameter	100	NSW only	Apply the spray from September to October. Apply by boom spray only. DO NOT apply to thistles over 20 cm in diameter. When thistles are over 20 cm in diameter use Archer plus MCPA 500 (referred to above). Clover damage: Damage to white clover will be no greater than damage with MCPA alone and less than damage from Archer plus MCPA mixtures. Damage to sub-clover may be greater than with MCPA or Amicide® 625 alone. DO NOT use for spot treatment.
		Californian thistle	From early buds to flowering (December to February)	Hand gun: 250 mL/100 L of water Boom spray: 2 L/ha	Vic and Tas only	Addition of Spraymate Activator Surfactant at 125mL/100L is recommended. Retreatment of regrowth in the year following treatment will usually be necessary to achieve a high level of control. NOTE: Clovers and medics will be eliminated for at least one year.
Pasture, forests, rights-of-way and industrial situations		Groundsel bush	Young seedlings to mature plants	Hand gun: 330 or 500 mL/100 L of water	Qld and NSW only	Spray foliage when growth is active. Use the lower rate on younger seedlings and the higher rate on plants more than 2 m tall or when growth is slow.
Pastures		Silver wattle	Active growth spring to summer	Hand gun: 500 mL/100 L of water Boom and aerial spray: 5 L/ha (weeds 30 cm to 2m) 7.0 L/ha (weeds 2 to 4 m) 8.5 L/ha (weeds 4 to 8 m)	NSW, Vic and Tas only	For effective control apply when bushes are growing actively. Large trees will not show complete necrosis. HANDGUN: Means high volume handgun NOT low volume knapsack. Spray to give full coverage of leaves and stems. Add Pulse Penetrant at 200 mL/100 L for optimum results. See General Instructions for handgun spraying. BOOM AND AERIAL SPRAYING: For boom spraying apply in 150 to 200 L of water/ha. For aerial treatment apply in a minimum of 50 L/ha of water containing 25 to 50% by volume of anti-evaporant oil such as Ulvapron*. Mix Archer and water first and then add Ulvapron. Maintain continuous agitation. Clovers and other legumes will be eliminated for at least one year.

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

WITHHOLDING PERIODS:

PASTURES AND FALLOW LAND:

DO NOT GRAZE OR CUT TREATED PASTURES FOR STOCK FEED FOR 7 DAYS AFTER APPLICATION.

CEREALS AND CANOLA:

DO NOT GRAZE OR CUT TREATED CEREALS OR CANOLA FOR STOCK FEED FOR 7 DAYS AFTER APPLICATION.

2. FORESTS

DIRECTIONS FOR USE: It is essential to select a rate appropriate to weed size. Best results will be obtained when weeds are actively growing at treatment.

RESTRAINTS: DO NOT apply to weeds which may be stressed (inactive growth) due to prolonged periods of extreme heat or cold, moisture stress (water logging or drought) or previous herbicide treatment as reduced levels of control may result.
DO NOT spray if rain is likely within 3 hours.

Pre-Planting: Boom and Aerial Application

FORESTS AND PLANTATION TREES INCLUDING <i>EUCALYPTUS</i> SPP., <i>CORYMBIA MACULATA</i> AND <i>PINUS RADIATA</i>				
Weeds Controlled	Weed Growth Stage	State	Rate/ha	Critical Comments
Capeweed, Thistles, Volunteer Legumes, Flatweed, Fleabanes	Pre-emergent	All States	2-6 L	Use the higher rate for extended pre-emergence control (>3 months).
<i>PINUS RADIATA</i> ONLY				
Silver Wattle (suppression only)	Pre-emergence from seeds	NSW, ACT, Vic, Tas, SA only	6 L	For best results apply ARCHER to bare soil just prior to Spring rain or when wattles are expected to germinate. Avoid application to heavy trash situations. A high level of suppression may not be achieved where rain does not fall for an extended period after application (>1 month), or where very high rainfall occurs after application (>1200 mm/yr).

Post-Planting: High Volume Spraying by Hand Gun

FORESTS AND PLANTATION TREES INCLUDING <i>EUCALYPTUS</i> SPP., <i>CORYMBIA MACULATA</i> AND <i>PINUS RADIATA</i>				
Weeds Controlled	Weed Growth Stage	State	Rate/100 L water	Critical Comments
Groundsel Bush	Young seedlings to mature plants	Qld, NSW, ACT only	330-500 mL	Spray foliage when growth is active. Use the lower rate on young seedlings and the higher rate on plants more than 2 m tall or when growth is slow.
Ragwort	Actively growing rosettes up to stem elongation and before flowering.	All States	200 to 300 mL	Spray from the rosette to the shooting stage of growth. Use the higher rate on large multi-crown plants. Addition of a 100% non-ionic surfactant such as Chemwet 1000 at 0.1% v/v is recommended. Add Nuquat (250 g/L) at 800mL/100L water plus a surfactant after opening of the first flowers, to prevent the formation of viable seed. Where Nuquat is added use a directed spray to avoid tree injury.
Silver Wattle	Active growth Spring to Summer	NSW, ACT, Vic, Tas, Sa only	500 mL	For effective control apply when bushes are growing actively. Large trees will not show complete necrosis. Handgun: Means high volume NOT low volume knapsack. (See General Instructions, Application). Spray to the point of run-off to give full coverage of leaves and stems. Add Pulse (organosilicone surfactant) at 200 mL/100 L for optimum results.
Cape Ivy	Any growth stage	Vic, Tas only	3.3 L/ha	Application may be made at any time of the year providing foliage is dry at the time. Avoid spraying non-target plants. Low volume application: For application by hand held weed wiper or C.D.A. use at dilutions with water of 100 g/L

Post-Planting: Boom and Aerial Application

FORESTS AND PLANTATION TREES INCLUDING <i>EUCALYPTUS</i> SPP., <i>CORYMBIA MACULATA</i> AND <i>PINUS RADIATA</i>					
Weeds Controlled	Weed Growth Stage	State	Rate/ha	Critical Comments	
Capeweed, Flatweed, Thistles (except Hardhead Thistle), Volunteer Legumes, Skeleton Weed	Actively growing rosettes, seedlings up to 15 cm diameter or height.	All States	500 mL to 1L	Cupping of the tip leaves and “weepy leader” symptoms may occur on certain <i>Eucalyptus</i> spp. and <i>Corymbia maculata</i> and are generally transient and do not result in long-term injury. These symptoms may be more obvious at rates of 1L/ha or higher or where mixtures are used on blue gum, shining gum and spotted gum. Where “weepy leader” effect is a concern use a directed spray.	
Capeweed, Flatweed, Fleabane, Thistles including Hardhead Thistle, Volunteer Legumes, Skeleton Weed	Actively growing rosettes and seedlings greater than 15 cm diameter or height up to stem elongation and before flowering.		2 L	Use the 500 mL rate until 3 months post-planting and the 1L rate for trees 3 months and older. Use the low rate only under ideal conditions with excellent weed growth and where knockdown control of small weeds is desired. Use the high rate where longer control is required of larger weeds. For the control of annual and certain perennial grasses, ARCHER can be tank mixed with Asset 520 Herbicide, See also comments in Mixing section. Bonza should not be used in tank mixes with Asset 520 and ARCHER on sensitive species such as blue gum, shining gum or spotted gum where rates of ARCHER are more than 2L/ha. Use a 100% non-ionic surfactant such as Chemwet 1000 at 0.1% v/v instead.	
Californian Thistle	From early bud to flowering (December to February)			For best control of California Thistle use a wetter such as Chemwet 1000 at 0.1% v/v. A second annual application may also be required for the best control.	
Ragwort	Small rosettes to larger rosettes up to stem elongation and before flowering			1 L to 2 L	Spray from the rosette to the shooting stage of growth. For small rosette seedling plants use the lower rate. For large rosette multicrown and/or perennial plants use the higher rate. Addition of a 100% non-ionic surfactant such as Chemwet 1000 at 0.1% v/v is recommended. Add diquat (200 g/L) at 1 L/100L water plus a surfactant after opening of the first flowers, to prevent the formation of viable seed. Where diquat is added use a directed spray to avoid tree injury.
Sorrel (suppression only)	Actively growing rosettes, seedlings up to 15 cm diameter or height			6 L to 8.5 L	Higher rates give better suppression. At rates greater than 6L use a directed spray to avoid tree injury.
Silver Wattle	Active growth Spring to Summer (0.5 to 2 m tall)	NSW, ACT, SA, Tas, Vic only	5 L	For effective control apply when bushes are growing actively. Large trees will not show complete necrosis. For boom spraying apply in 150 to 200 water/ha. For aerial treatment apply in a minimum of 50 L/ha of water containing 25 to 50% by volume of anti-evaporant such as Ulvapron®. Mix ARCHER and water first and then add Ulvapron. Maintain continuous agitation. At rates of 7L and 8.5L for <i>Eucalypt</i> spp. use a directed spray to avoid tree injury.	
	Active growth Spring to Summer (2 to 4 m tall)		7 L		
	Active growth Spring to Summer (4 to 8 m tall)		8.5 L		

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

WITHHOLDING PERIOD:**FOREST HARVEST WITHHOLDING PERIOD:****NONE REQUIRED WHEN USED AS DIRECTED.****GRAZING/STOCKFOOD WITHHOLDING PERIOD:****FORESTS EXCEPT *Pinus radiata* PLANTATIONS:****DO NOT GRAZE FOR 7 DAYS AFTER APPLICATION.*****Pinus radiata* PLANTATIONS:****DO NOT GRAZE FOR 14 DAYS AFTER APPLICATION.**

GENERAL INSTRUCTIONS**MIXING**

Half fill the spray tank with water and add the required quantity of Archer and complete filling. Agitate continuously to ensure thorough mixing before and during application. Only mix sufficient chemical for each day's work.

Tank mixtures: Wettable powder or dry flowable formulations should be added to the spray tank first, followed by suspension concentrates (flowables), aqueous concentrates (Archer) and the emulsifiable concentrate formulations (eg. Asset Herbicide or Nufarm LVE MCPA).

COMPATIBILITY

Archer is compatible with the following:

BROADLEAF HERBICIDES:

Starane^{*}, Associate[®]/Brushkiller, Bromicide[®] 200, Bromicide[®] MA, Lusta[®], Nufarm Flowable Diuron, Nufarm Glyphosate CT, Credit[®] plus Bonus[®], Roundup PowerMAX[^], Roundup[^] CT, Weedmaster[®] Duo, Nufarm MCPA 500, Nufarm LVE MCPA, Nuquat[®] 250, Spray-Seed^{*}, terbutryn, Amicide[®] 625.

GRASS HERBICIDES IN CEREAL CROPS:

Nugrass[®], Grasp^{*}, Puma^{*} (Grasp and Puma for wild oat control only)

GRASS HERBICIDES ON BROADLEAF CROPS:

Asset[®]

APPLICATION**BOOM SPRAYING CROPS and PASTURES**

Apply Archer in sufficient water to obtain good coverage.

It should be applied by an accurately calibrated ground rig or aircraft, delivering 200 to 300 micron droplets and not less than 50 L/ha water volume for boom sprayers or not less than 20 L/ha for aerial applications.

Hardhead thistle - Use a spray volume of 200 to 250 L/ha of water.

Silver wattle - Use a spray volume of 150 to 200 L/ha of water by ground boomspray and a minimum spray volume of 50 L/ha by aircraft.

BOOM SPRAYING PLANTATION TREES:

Apply ARCHER in sufficient water to obtain good coverage. It should be applied by an accurately calibrated ground rig or aircraft, delivery 200 to 300 micron droplets and not less than 50 L/ha water volume for boom sprayers or not less than 20 L/ha for aerial application.

HIGH VOLUME HAND GUN

Apply the recommended mix to give full coverage of leaves and stems through a No. 6-8 tip at 700 to 1500 kPa. Spray volume for effective coverage of dense two metre high silver wattle should be 30 to 40 litres of spray per 100 m² (10 x 10) of infestation. For larger areas an equivalent would be 3000 to 4000 litres per infested hectare.

CLEANING SPRAY EQUIPMENT

Rinse water should be discharged into a designated disposal area or, if this is unavailable, onto unused land away from desirable plants and water courses.

PARTIAL CLEANING

(before spraying other labelled or tolerant crops)
After using Archer, empty the tank completely and drain the whole system. Thoroughly wash inside the tank using 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 crops)
After using Archer, empty the tank completely and drain the whole system. Thoroughly wash inside the tank using a pressure hose. Quarter fill the tank with clean water and circulate as above, then drain. Quarter fill the tank again and add an alkaline detergent such as Nufarm Spraymate Tank & Equipment Cleaner according to the label directions and circulate throughout the system for at least fifteen minutes. DO NOT use chlorine based cleaners. Drain, remove filters and nozzles and clean separately. Rinse inside the tank thoroughly using a pressure hose and flush the system with clean water.

RESISTANT WEEDS WARNING**GROUP I HERBICIDE**

Archer Herbicide is a member of the Pyridine group of herbicides. Archer has the disruptor of plant cell growth mode of action. For weed resistance management, Archer is a Group I herbicide. Some naturally occurring weed biotypes resistant to Archer and other Group I 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 Archer or other Group I herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Nufarm Australia Limited accepts no liability for any losses that may result from the failure of Archer to control resistant weeds. Strategies to minimise the risk of herbicide resistance are available. Contact your farm chemical supplier, consultant, local Department of Agriculture or local Nufarm Representative.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT apply under weather conditions, or from spraying equipment that may cause spray drift onto nearby susceptible plants/crops, cropping lands or pastures.

Composts and mulches - DO NOT apply Archer Herbicide to crops or pastures that will be used for the production of compost or mulches or mushroom substrate. Such compost or mulch made from plant material treated with Archer may cause damage to susceptible crops and plants.

Susceptible crops and plants include, but are not limited to chickpeas, clover, cotton, faba beans, field peas, fruit trees, lentils, lupins, lucerne, medics, ornamentals, potatoes, safflower, tomatoes, vegetables, grape and kiwifruit vines, vetches, and wattles. Field peas, faba beans, lentils and vetches are particularly susceptible and should not be sown the season following an application of Archer at 500 mL/ha.

Where Archer residue carry over from use rates of less than 500 mL/ha is suspected and susceptible crops are to be planted, test the treated area as follows:

- **Field bioassay** - where rain allows, plant a small area of the susceptible crop 4 to 6 weeks before desired planting date and take note of any symptoms of injury. If any herbicide symptoms are observed, only plant either canola or a cereal (see recommendation for northern and southern Australia below).
- **Pot bioassay** - where not practical to do field bioassay, plant a small number of seeds of the susceptible crop into pots containing soil from the treated field. Do this 4 to 6 weeks before desired planting date. If any herbicide symptoms are observed, only plant either canola or cereal (see recommendation for northern and southern Australia below).

Stubble from treated crops - ensure that harvesters effectively spread crop straw and DO NOT leave a heavy 'header trail' after harvest. Burn (if legal in the area), bale and remove, slash or incorporate stubble as soon as practical after harvest and as long as possible before planting next year to allow microbial breakdown of any residues in straw. Heavy stubble loads may carry more residue into the following season. Where heavy stubble burdens and/or non-wetting soils exist and less than recommended rain amount have occurred from application to planting the susceptible crop (see below), only plant a winter or summer cereal or canola.

Planting crops following use of Archer herbicide in previous crop - planting crops 'dry' without significant rain (see below) in the 'autumn break' increases the risk of injury to susceptible crops. This practice should be avoided, or only plant a winter or irrigated summer cereal crop or canola. In severely dry conditions, where less than 30% of average annual rainfall and/or less than the minimum rain (see below) has fallen between application and planting the next year, only plant a winter or irrigated summer cereal or canola.

PLANTBACK PERIODS FOR SOUTHERN AUSTRALIA WINTER DOMINANT RAINFALL AREAS (Sth NSW, VIC, SA, WA):

Required rain - A minimum 25 mm rain event in the post harvest summer to autumn period, with a subsequent extended period of at least 1 week where the top 10 cm of the soil stays moist is required to enable breakdown of soil residues. Fastest residue breakdown will occur under good soil moisture and warm conditions, which promote microbial activity. Where significant rain (>25 mm) has fallen in summer to autumn, with soil wetting for at least one week, the following plantback periods apply:

Following Crops	Rate (mL/ha)	Plantback Interval
Clover, chickpea, faba bean, field pea, lentils, lupins, medics and vetch	Up to 300	9 months
	300 - 500	12 months
	> 500	24 months
Barley, canola, wheat, oats	All label rates	1 week

PLANTBACK PERIODS FOR NORTHERN AUSTRALIA SUMMER DOMINANT RAINFALL

AREAS (Nth NSW, QLD):

Required rainfall before plantback:

If planting susceptible summer crops - at least 100mm rain

If planting susceptible winter crops - at least 150mm rain

This rain or irrigation should wet the soil for extended periods (at least one week) this is essential for breakdown of soil residues prior to planting susceptible crops.

If planting a cereal or canola crop - at least 50 mm of rain or irrigation is required to enable soil wetting for at least one week. Where these requirements have been met the following plantback periods apply:

Following Crops	Rate (mL/ha)	Plantback Interval
	Up to 75 mL/ha	75 - 300mL/ha
Chickpea, cotton, soybean, sunflower	3 months	6 months
Lucerne	9 months	9 months
Maize, Sorghum	1 week	2 weeks
Wheat, barley, oats, canola	1 week	1 week

Note: Susceptible crops should not be sown for at least 2 years where Archer Herbicide at more than 300mL/ha has been used in northern Australia.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Archer has low toxicity to fish, birds, honey bees, livestock, earthworms and aquatic organisms. DO NOT contaminate streams, rivers or waterways with chemical or used containers.

PROTECTION OF LIVESTOCK

DO NOT graze or cut treated crops for stock food except as specified under WITHHOLDING PERIODS.

STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

SMALL SPILL MANAGEMENT

Wear appropriate clothing whilst cleaning up small spills, (see SAFETY DIRECTIONS). Apply absorbent material such as earth, sand or clay granules to the spill. Sweep up material for disposal when absorption is complete. Dispose of the contaminated material in accordance with STATE and/or LOCAL REGULATIONS.

SAFETY DIRECTIONS

May irritate the eyes and skin. Avoid contact with eyes and skin. **DO NOT** inhale the spray mist.

When preparing the spray, wear elbow-length PVC gloves and a face shield. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

After each day's use, wash gloves and face shield.

FIRST AID

If poisoning occurs, contact a Doctor or Poisons Information Centre (Phone Australia 13 11 26).

MATERIAL SAFETY DATA SHEET

For further information refer to the Material Safety Data Sheet (MSDS).

CONDITIONS OF SALE

"Nufarm Australia Limited ('Nufarm') shall not be liable for any loss injury damage or death whether consequential or otherwise whatsoever or howsoever arising whether through negligence or otherwise in connection with the sale supply use or application of this product. The supply of this product is on the express condition that the purchaser does not rely on Nufarm's skill or judgment in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of Nufarm has any authority to add to or alter these conditions."

APVMA Approval No: 52139/0207

In case of emergency: Phone 1800 033 498

Ask for shift supervisor. Toll free 24 hours.

- ® Amicide, Archer, Asset, Associate, Bonus, Bromicide, Credit, Lusta, Nugrass, Nuquat and Weedmaster are registered trademarks of Nufarm Australia Limited.
- * Other registered trademarks.
- ^ Roundup and Roundup PowerMAX are registered trademarks of Monsanto Technology LLC used under licence by Nufarm Australia Limited.