

# POISON

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

Nufarm  
**Asset™**

Herbicide

Active Constituent: 130g/L HALOXYFOP present as haloxyfop-R methyl ester  
Solvent: 740g/L LIQUID HYDROCARBON

**GROUP A HERBICIDE**

For the post-emergent control of a wide range of annual and perennial grass weeds in grain legume and oilseed crops, lucerne, medic and clover pasture and seed crops, forestry, bananas, citrus, grapes, pineapples, pome fruit, stone fruit, pyrethrum, tropical fruit and nut crops as specified in the Directions for Use Table.

**ALWAYS READ THE LABEL AND USE ONLY AS DIRECTED**

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TM Trademark pending

## GENERAL INSTRUCTIONS

### Mixing

Add water to the spray tank to 10cm above the level of agitation and ensure the agitation device is working vigorously. (There must be a minimum of 100L of water in the tank before any pesticide is added).

If tank mixing, firstly, add any soluble liquid formulations) (eg. Lontrel\*/Archer™ Herbicide) and allow agitation for approximately one minute.

Then add Asset at the point where agitation is strongest. (**Do not add Asset through a strainer or sieve**) Allow further agitation for one minute.

Half fill the spray tank.

If using wettable powder or water dispersible granules, or other emulsifiable concentration formulations (eg. Chlorpyrifos 500 EC Insecticide or LE-MAT\*/Comrad®), these should be **added after the Asset** to the half full spray tank ensuring vigorous agitation.

Finally add Impel™ Spray Adjuvant or approved alternate spraying oil/wetter. (See section on spraying oils/wetters) and continue filling the tank to the required volume maintaining agitation at all times.

Only mix sufficient solution for immediate use. Asset and any other tank mixes should be applied immediately for best results.

### Spraying oils/wetters

**<sup>1</sup>Spraying Oils:** It is essential to add an adjuvant to Asset. Best results will be achieved with Impel Spray Adjuvant at 500mL/100L of spray solution. Alternatively, other oils plus a non-ionic wetter may also be used. When other crop spraying oils are used, mix at 1.0L/100L and add a non-ionic wetter (surfactant) at 200mL/100L of spray solution. **Use of an oil is not always recommended.** See Critical Comments for specific situation recommendations.

**<sup>2</sup>Non-ionic Wetters:** When Impel or other oils are not used, a 100% concentrate non-ionic wetter (such as Chemwet 1000 at 200mL/100L) must be used along with the higher rate of Asset as specified in the directions for use table.

Where water volumes of less than 50L/ha are used, **DO NOT** use less than 250mL/ha of Impel or less than 100mL/ha of wetter.

### CANOLA, LUCERNE, MEDIC AND CLOVER PASTURES AND SEED CROPS:

When tank mixing Asset with Lontrel\*/Archer™ (canola only) or Broadstrike (lucerne, clover and medics), use Impel Spray Adjuvant with the lower rates of Asset or a wetting agent with the higher rates of Asset unless otherwise specified. When mixing Asset with other broadleaf herbicides on these crops DO NOT use an oil, use a wetter instead.

### FIELD PEAS AND CANOLA:

The only oil recommended is Impel Spray Adjuvant.

### NAVY BEANS, PEANUTS, SOYBEANS:

When mixing with Blazer or Basagran DO NOT add spraying oil to these mixtures.

### Compatibility:

Ground use only: Asset Herbicide can be tank mixed with:

Insecticides: Lorsban\* 500 EC/Chlorpyrifos 500EC  
Insecticide  
dimethoate

Herbicides: endosulfan  
omethoate  
Broadstrike\* Herbicide  
Lontrel\*/Archer™ Herbicide  
(clopyralid)  
Starane\* 200/Tomigan\*<sup>1</sup> Herbicide  
Basagran\*  
Blazer\*  
atrazine  
MCPA ester (LVE) - **DO NOT exceed 700mL/ha of MCPA LVE**  
simazine

Fungicides: mancozeb

Trace elements: magnesium sulphate  
zinc sulphate

Aerial use: No product other than a recommended crop oil or wetter should be mixed with Asset Herbicide when applied by air except for addition of Lontrel/Archer for use in forestry and canola only.

### Application

Apply Asset Herbicide in sufficient water to obtain good coverage. It should be applied by an accurately calibrated ground rig or aircraft delivering 200-300 micron droplets.

The following spray volumes are recommended:

Ground application	50-150L/ha
Aerial application	30L/ha minimum

**Use higher water volumes** in dense crops where the weeds may be shielded by the crop canopy.

### CLEANING SPRAY EQUIPMENT

If broadleaf herbicides, particularly sulfonylureas, have been used in the spray equipment at any time prior to Asset, particular care should be taken to follow the directions on the relevant broadleaf herbicide label for equipment cleaning, or damage to susceptible crops may occur.

After using Asset, empty the tank completely and drain the whole system. Thoroughly wash inside the tank using a pressure hose, drain the tank and clean any filters in the tank, pump, line and nozzles.

**To rinse.** After cleaning the tank as above, quarter fill the tank with clean water and circulate through the pump, lines, hoses and nozzles. Drain and repeat the rinsing procedure twice.

**To decontaminate.** Before spraying cereals, maize, sorghum or other sensitive crops, wash the tank and rinse the system as above. Then quarter fill the tank and add an alkali detergent (e.g. SURF\*, OMO\*, DRIVE\*, Cold Water SURF Concentrate\*, DynamoMatic Concentrate\*) at 500mL/100L of water or the powder equivalent at 500g/100L of water and circulate throughout the system for at least fifteen minutes. Drain the whole system. Remove filters and nozzles and clean them separately. Finally flush the system with clean water and allow to drain. Chlorine based cleaners are not recommended.

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

**GENERAL INSTRUCTIONS: (CONTINUED)****RESISTANT WEEDS WARNING****GROUP A HERBICIDE**

Asset Herbicide is a member of the aryloxyphenoxy propionate group of herbicides. The product has the acetyl CoA carboxylase inhibitor mode of action. For weed resistance management the product is a Group A herbicide.

Some naturally occurring weed biotypes resistant to the product and acetyl CoA carboxylase inhibitor 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 this product or other acetyl CoA carboxylase inhibitor.

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 this product 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 Australia Limited representative.

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

Asset Herbicide damages cereals and grasses. **DO NOT** allow spray drift to occur. **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. Cereal crops or grasses planted within twelve weeks of application may be damaged by the residual effects of Asset Herbicide, particularly on light and red soils.

**PROTECTION OF LIVESTOCK**

**DO NOT** graze or cut treated crops for stock food except as specified under withholding periods.

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

Asset Herbicide is toxic to fish. **DO NOT** contaminate streams, rivers or waterways with the chemical or used containers.

**STORAGE AND DISPOSAL**

Store in the closed, original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight. **DO NOT** store near feedstuffs, fertilisers or seeds. 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 500mm 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.

**Refillable containers:** Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

**Envirodrum 110L Mini Bulk Returnable Container.**

Store the original sealed Envirodrum in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight. Do not tamper with the Micro Matic valve or the security seal. Do not contaminate the Envirodrum with water or any other foreign matter. After each use of the product, please ensure that the Micro Matic coupler, delivery system and hoses are disconnected, triple rinsed with clean water and drained accordingly. When the contents of the Envirodrum have been used, please return the empty Envirodrum to the point of purchase. The Envirodrum remains the property of Nufarm Australia Limited.

**SMALL SPILL MANAGEMENT**

Wear protective equipment (see SAFETY DIRECTIONS). Apply absorbent material such as earth, sand, clay granules or cat litter to the spill. Sweep up material when absorption is completed and contain in a refuse vessel for disposal in the same manner as for containers (see STORAGE AND DISPOSAL). If necessary wash the spill area with an alkali detergent and water and absorb the wash liquid for disposal as above. Prevent entry of chemical or used/damaged containers into drains, streams or waterways.

**SAFETY DIRECTIONS**

Product will irritate the eyes and may irritate the skin. Avoid contact with eyes and skin. When preparing the spray, wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length PVC gloves and face shield or goggles. If product in the eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

**FIRST AID**

If poisoning occurs contact a doctor or Poisons Information Centre (Phone 13 11 26). If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

**MATERIAL SAFETY DATA SHEET**

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

NRA Approval No: 53469/0101

**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 judgement 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."

**In case of emergency: Phone 1800 033 498**

Ask for shift supervisor. Toll free 24 hours.

® Comrad is a registered trademark of Nufarm Australia Limited.

™ Trademark pending.

\*1 Tomigan is a trademark of Agan Chemical Manufacturers Limited.

\* Other registered trademarks

**DIRECTIONS FOR USE****RESTRAINTS:**

**DO NOT** apply to weeds which may be stressed (not actively growing) due to prolonged periods of extreme cold, moisture stress (waterlogged or drought affected), poor nutrition or previous herbicide treatment as reduced levels of control may result.

**DO NOT** spray if rain is likely to occur within one hour.

Crops	Crop Growth Stage	Weeds Controlled	Weed Growth Stage	Rate (mL/ha)	Critical Comments
Lucerne Medic and Clover pastures or seed crops <sup>4</sup>	Apply from 2nd leaf, onwards	Annual ryegrass	2 to 4 leaf	300 + oil <sup>1</sup> or 400 + wetter <sup>1</sup>	<sup>1 2</sup> See GENERAL INSTRUCTIONS, Spraying oils/wetters section.  <u>FIELD PEAS AND CANOLA:</u> The only oil recommended is Impel™ Spray Adjuvant
			5 leaf to early tillering	400 + Impel™ Spray Adjuvant <sup>1</sup>	
Canola	Apply from 2nd leaf to prior to bud formation and stem elongation	Barley grass Brome grass Paradoxa grass	2 to 4 leaf	200 + oil <sup>1</sup> or 300 + wetter <sup>2</sup>	<u>LUPINS AND FIELD PEAS:</u> Mixtures with Brodal* or simazine may cause crop yellowing and separate applications are recommended.  <u>CHICKPEAS, FABO BEANS, LENTILS AND VETCH:</u> Broadleaf herbicides should not be added to Asset
			5 leaf to early tillering	300 + oil <sup>1</sup> or 400 + wetter <sup>2</sup>	
Chickpeas Faba beans Field peas Lentils Lupins Vetch	Apply from 2nd leaf, 2nd node or 2nd branch to full flowering	Volunteer cereals	2 to 4 leaf	150 + oil <sup>1</sup> or 200 + wetter <sup>2</sup>	<u>LUCERNE, CLOVER OR MEDIC PASTURE:</u> If grazed or cut for hay immediately prior to treatment delay application until all grasses have fully expanded leaves. Use 300mL + oil or 400mL + wetter/ha. (See GENERAL INSTRUCTIONS, Spraying oils/wetters section). If silver grass ( <i>Vulpia</i> spp.) is present in pasture, simazine should be tank mixed with the higher rates of Asset plus a non-ionic wetter. <b>DO NOT</b> use crop oils. (See GENERAL INSTRUCTIONS, Spraying oils/wetters section).  <u>NOTE:</u> Storksbill may not be controlled if simazine or Broadstrike* are tank-mixed with Asset. <sup>3</sup> Use lower rate when growing conditions and crop competition are good and when weed populations are below 100 plants/m <sup>2</sup> . Use the higher rate when weed populations are above 100 plants/m <sup>2</sup> or when crop competition is poor.
		Wild oats <u>WA, SA, Tas, Vic Southern and Central NSW only</u>	5 leaf to early tillering	200 + oil <sup>1</sup> or 300 + wetter <sup>2</sup>	
		<u>Northern NSW and QLD only</u>	2 to 4 leaf	200 + oil <sup>1</sup> or 300 + wetter <sup>2</sup>	
			5 leaf to early tillering	300 + oil <sup>1</sup> or 400 + wetter <sup>2</sup>	
Lucerne Medic and clover seed crops and pastures	Apply from 2nd trifoliolate leaf onwards	Prairie grass ( <i>Bromus catharticus</i> )	5 leaf to early tillering	400 + Impel Spray Adjuvant	
	Apply from cotyledons onwards	Musky or fern leaf Storksbill: ( <i>Erodium moschatum</i> )	Up to 6 leaf or 5cm diameter	150 <sup>3</sup> - 200 + Impel Spray Adjuvant <sup>1</sup> at 500 mL/100L of spray mix	
		Long or shiny leaf storksbill ( <i>E. botrys</i> )	Up to 8 leaf or 5cm diameter		
Lucerne	Apply from 2nd leaf onwards	Australian millet	2 leaf to tillering up to 15 cm	600 <sup>1</sup>	<sup>1</sup> See GENERAL INSTRUCTIONS, Spraying oils/wetters section.  <u>NAVY BEANS, PEANUTS, SOYBEANS:</u> When broadleaf weeds are present Blazer* (except on navy beans) or Basagran* at label rates may be tank mixed with Asset plus wetter. When tank mixing with the above broadleaf herbicides, only use Asset at 600mL/ha for optimum grass control. Tank mixtures may cause transient leaf spotting on the crop but do not normally affect yield. When mixing with Blazer or Basagran <b>DO NOT</b> add spraying oil to these mixtures. (See GENERAL INSTRUCTIONS, Spraying oils/wetters section).
		Barnyard grass	2 to 5 leaf  tillering up to 15 cm	400 <sup>1</sup>  600 <sup>1</sup>	
Navy beans Soybeans Mung beans	Apply from 2nd leaf to flowering	Crowsfoot grass Green panic Johnson grass (rhizome)	2 leaf to tillering up to 15 cm	600 <sup>1</sup>	
Peanuts	Apply from 2nd leaf to pegging	Johnson grass (seedling)	2 to 5 leaf	400 <sup>1</sup>	
Cotton	Apply from 2nd leaf before the onset of flowering	Liverseed grass (seedling)	tillering and up to 15 cm	600 <sup>1</sup>	<b>DO NOT</b> tank mix broadleaf herbicides with Asset if grasses have begun tillering or if the grasses are under moisture stress.
Sunflowers	Apply from 2nd leaf to head initiation	Mossman River grass			
		Summer Grass	2 leaf to tillering up to 15 cm	600 <sup>1</sup>	

<sup>4</sup>Except Queensland.

**DIRECTIONS FOR USE (CONTINUED):**

Crops	Crop Growth Stage	Weeds Controlled	Weed Growth Stage	Rate (mL/ha)	Critical Comments
<b>Sunflowers continued</b>	Apply from 2nd leaf to head initiation	Volunteer cereals	2 to 4 leaf	400 <sup>1</sup>	Continued See Critical Comments on previous page.
			tillering up to 15cm	600 <sup>1</sup>	
<b>Orchard, vine and plantation Crops including:</b> Apples Avocado Banana Blueberry Citrus Custard apple Feijoa Grapevines Guava Kiwifruit Lichi Longan Mango Nashi Nut trees Passionfruit Paw paw Pear Persimmon Pineapple Rambutan Stone fruit	All growth stages	Perennial grasses: Couch	Established stands	1600 - 3200 <sup>1</sup>	<sup>1</sup> See GENERAL INSTRUCTIONS, Spraying oils/wetters section.
		Paspalum Johnson grass	Vegetative to early tillering	800 <sup>1</sup>	<b>Couch Grass:</b> Only use on actively growing stands which are not moisture stressed. Use the 3200 mL/ha rate for optimum control.
			Late tillering	1600 <sup>1</sup>	
<u>Annual grasses:</u> Annual ryegrass Barley grass Banyard grass Brome grass Crowfoot grass Green panic Lesser canary grass Liverseed grass Mossman river grass Paradoxa grass Summer grass Volunteer cereals Wild oats	2 leaf to tillering	800 <sup>1</sup>	Spray should be directed to the base of the tree or vine avoiding contact with fruit and foliage.  Spot spray: Use 10mL to 20mL/10L of water. Use higher rate on late tillering mature grasses.  Where treated in association with perennial grasses, these annual grasses will be controlled		
<b>Forestry:</b> <i>Pinus radiata</i> <i>Eucalyptus</i> spp					
<b>Forestry:</b> <i>Pinus pineaster</i>		Annual grasses as above	Vegetative to tillering	500 - 1000 <sup>1 5</sup>	<sup>1</sup> See GENERAL INSTRUCTIONS, Spraying oils/wetters section. <sup>5</sup> Apply lowest rate to newly emerged grasses, increasing the rate as they develop.
<b>Pyrethrum</b>		Barley grass Brome grass Rope twitch Barynard grass <i>Erodium</i> spp. Volunteer cereals		400 - 1000 <sup>1</sup>	<sup>1</sup> See GENERAL INSTRUCTIONS, Spraying oils/wetters section.

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

**HARVESTING WITHHOLDING PERIODS:**

**NOT REQUIRED WHEN USED AS DIRECTED FOR:**

**CANOLA, CHICKPEAS, COTTON, FABA BEANS, FIELD PEAS, LENTILS, LUPINS, MUNG BEANS, NAVY BEANS, PEANUTS, SOYBEANS, SUNFLOWERS, VETCH.**

**DO NOT HARVEST FOR:**

**MEDIC AND CLOVER SEED CROPS: 7 DAYS AFTER APPLICATION**

**STOCK FOOD WITHHOLDING PERIODS:**

**DO NOT GRAZE OR CUT FOR STOCK FOOD FOR:**

**CANOLA, CHICKPEAS, COTTON, FABA BEANS, FIELD PEAS, LENTILS, LUPINS, NAVY BEANS, PEANUTS, SOYBEANS, SUNFLOWERS AND VETCH: 28 DAYS AFTER APPLICATION**

**LUCERNE: 21 DAYS AFTER APPLICATION**

**MEDIC AND CLOVER PASTURE: 7 DAYS AFTER APPLICATION**

**COTTON GIN TRASH MUST NOT BE FED TO ANIMALS.**