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

**Apparent** 

**Panther**

**SELECTIVE HERBICIDE**

ACTIVE CONSTITUENTS:

250g/L MCPA present as the ETHYL HEXYL ESTER  
25g/L DIFLUFENICAN

SOLVENTS: 325g/L LIQUID HYDROCARBONS  
150g/L N-METHYL-2-PYRROLIDONE

GROUP **F I I** HERBICIDE

For the control of certain broadleaf weeds  
in winter cereals and clover as specified  
in the Directions for Use table.

**IMPORTANT: READ THOROUGHLY BEFORE  
OPENING OR USING THIS PRODUCT**

APVMA Approval No. 66925/127966

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**DIRECTIONS FOR USE**

**Restrains:** DO NOT apply if crop or weeds are stressed due to dry or excessively moist conditions.  
 DO NOT apply to crops under stress due to disease or insect damage.  
 DO NOT apply to frost-affected crops or if frosts are imminent.  
 DO NOT apply when heavy rain is expected within 4 hours.

CROP	WEEDS CONTROLLED	STAGE OF WEED GROWTH	STATE
Cereals Wheat, barley, oats, triticale, cereal rye (including cereals undersown with clover) Pasture Newly sown and established clover-based pasture, clover for hay and seed production	Wild Radish	Up to the 2 leaf stage and not more than 60mm in diameter	WA only
		Up to the 4 leaf stage and not more than 120mm in diameter	ALL STATES
		Up to the 6 leaf stage and not more than 150mm in diameter	
		Up to the 8 leaf stage and not more than 180mm in diameter	
	Charlock, Hedge Mustard, Indian Hedge Mustard, Shepherd's Purse, Turnip Weed, Wild Turnip	Up to the 2 leaf stage and not more than 60mm in diameter	ALL STATES
		Up to the 4 leaf stage and not more than 120mm in diameter	
		Up to the 6 leaf stage and not more than 150mm in diameter	
	London Rocket	Up to the 5 leaf stage and not more than 120mm in diameter	QLD only
	Ward's Weed		SA only
	Capeweed	Up to the 2 leaf stage and not more than 60mm in diameter	ALL STATES
		Up to the 4 leaf stage and not more than 120mm in diameter	
	Crassula	Up to the 2 leaf stage	ALL STATES
		Up to the 4 leaf stage	
	Prickly Lettuce	Up to the 2 leaf stage	ALL STATES
		Up to the 4 leaf stage	
Up to the 6 leaf stage			
Up to the 2 leaf stage			
Dense-flower Furnitory	Up to the 2 leaf stage	ALL STATES	
Corn Gromwell, Saffron Thistle, Toad Rush			
Deadnettle		NSW, VIC, SA only	
Sorrel	Up to the 2 leaf stage	VIC only	
Canola (rape)	Up to the 4 leaf stage	ALL STATES	
Purple Goosefoot	Up to the 6 leaf stage	QLD only	
Turnip Weed, Wild Turnip	Cotyledon to 2 leaf stage	NSW only (West of Newell Hwy) SA only (Eyre peninsula north of the line between Venus Bay and Cowell)	

RATE/ha	CRITICAL COMMENTS
250mL	<b>CROP STAGE</b> <b>Cereals</b> Up to 750mL (3 leaf to fully tillered stage - Z13 to 30). Over 750mL (5 leaf to fully tillered stage - Z15 to 30). Optimum results are achieved when sprayed at 3-5 leaf crop stage (generally 4-8 weeks post sowing).
500mL	<p><b>WA only:</b> DO NOT apply to Barley or Kulin Wheat before the 5 leaf stage (Z15).  <b>Warning:</b> APPARENT Panther Selective Herbicide may cause transient crop yellowing of cereals. Some varieties of oats have not been tested. (Refer to "Crop Tolerance" section of General Instructions).</p> <p><b>Clover</b>          Application is recommended prior to the eighth trifoliate leaf stage, however, applications prior to the third leaf stage may result in crop damage especially under stressed conditions and in sandy soils.          DO NOT apply to Annual Medics or lucerne. <b>Warning:</b> APPARENT Panther Selective Herbicide may cause transient crop yellowing of clover, and may affect growth and seed set of some varieties of clover. (Refer to "Crop Tolerance" section of General Instructions).</p> <p><b>WEED STAGE</b>          Apply when weeds are actively growing. In most situations the rate specified for each weed size will give satisfactory control. Under certain conditions such as:</p> <ul style="list-style-type: none"> <li>• high crop and weed density;</li> <li>• late season germinations;</li> <li>• abnormal weed growth (including early flowering), higher rates of product (up to the maximum rate of application specified for that weed) may be required.</li> </ul> <p>APPARENT Panther Selective Herbicide will not effectively control:</p> <ul style="list-style-type: none"> <li>• regrowth of suppressed weeds;</li> <li>• transplanted weeds;</li> <li>• regrowth from rhizomes or roots;</li> <li>• weeds growing under stress from previous herbicide applications.</li> </ul> <p><b>GRAZING</b>          Efficacy on larger weeds will be improved by grazing with normal levels of stock after the 7 day withholding period. Refer to 'Protection of Livestock' for grazing precautions.</p> <p><b>APPLICATION</b>          Activity of this product will be reduced if weeds are stressed. Optimum results will be obtained if good soil moisture exists at and after application. Where crop or weed density is high, water volume should be increased.</p>
750mL	
1.0L	
500mL	
750mL	
1.0L	
500mL	
1.0L	
500mL	
1.0L	
500mL	
1.0L	
500mL	
350mL	

CROP	WEEDS CONTROLLED	STAGE OF WEED GROWTH	STATE
Cereals Wheat, barley, oats, triticale, cereal rye	Fumitory	2 - 6 leaf stage	ALL STATES
<b>SUPPRESSION OF THE FOLLOWING WEEDS</b>			
Cereals Wheat, barley, oats, triticale, cereal rye (including cereals undersown with clover) Pasture Newly sown and established clover based pasture, clover for hay and seed production	Saffron Thistle	Up to the 6 leaf stage	ALL STATES
	Chickweed, Fireweed, Hexham Scent (King Island Melilot), Iceplant, Mouse-eared Chickweed, Night-scented Stock, Paterson's Curse, Peppercress, Skeleton Weed, Long Storksbill, Volunteer Lupins	Up to the 4 leaf stage	
	Wireweed (Hogweed)		
	Common Sowthistle (Milk Thistle), Cowvine, Dock, Doublegee (Spiny Emex), Fat Hen, Horehound, Hyssop, Loosestrife, Marshmallow, Rough Poppy, Scarlet Pimpernel, Stemless Thistle, Tree Hogweed, Variegated Thistle, Vetch (tares)	Up to the 2 leaf stage	
Cereals Wheat, barley, oats, triticale, cereal rye	Wild Radish	Up to the 4 leaf stage and not more than 120mm in diameter	ALL STATES
		Up to the 6 leaf stage and not more than 150mm in diameter	
		Up to the 8 leaf stage and not more than 180mm in diameter*	

RATE/ha	CRITICAL COMMENTS
500mL +200mL Terbutryn (500g/L)	(Continued from above) <b>WILD RADISH</b> APPARENT Panther Selective Herbicide will provide residual control of Wild Radish for up to 4 weeks after application. Effective residual activity of this product may be reduced where: <ul style="list-style-type: none"> <li>• rates lower than 1.0L/ha are used;</li> <li>• dry conditions prevail;</li> <li>• poor coverage of the soil surface is achieved;</li> <li>• crop is planted in non-wetting sand;</li> <li>• soils contain a high content of organic matter.</li> </ul> Optimum results will be obtained if good soil moisture exists at and after application.
1.0L	
750mL	
1.0L	
350mL plus 200mL MCPA LVE (500g/L)	<b>Refer also to all Critical Comments relating to weed stage, grazing, application and wild radish above.</b> * Reduced efficacy (suppression only) may be achieved on Wild Radish larger than 8 leaf or greater than 180mm in diameter.
500mL plus 200mL MCPA LVE (500g/L)	DO NOT use this tank-mix if cereals are undersown with lucerne or annual medics. <b>Crop Stage</b> APPARENT Panther Selective Herbicide 350mL + MCPA LVE 200mL: Apply from 3 leaf to fully tillered (Zadok's Z13 to Z30). APPARENT Panther Selective Herbicide 500mL + MCPA LVE 200mL: Apply from 3 leaf to fully tillered (Zadok's Z13 to Z30).
500mL plus 400mL MCPA LVE (500g/L)	APPARENT Panther Selective Herbicide 500mL + MCPA LVE 400mL: Apply from 5 leaf stage to fully tillered (Zadok's Z15 to Z30). Optimum results are achieved when sprayed at 3-5 leaf crop stage (generally 4-8 weeks post sowing). <b>WA only:</b> DO NOT apply to Barley or Kulin Wheat before the 5 leaf stage (Z15). <b>Warning:</b> APPARENT Panther Selective Herbicide may cause transient crop yellowing of cereals. Some varieties of oats have not been tested. (Refer to "Crop Tolerance" section of General Instructions). Observe instructions also on MCPA LVE product label.

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

**WITHHOLDING PERIODS**

**CROP HARVEST: NOT REQUIRED WHEN USED AS DIRECTED.**

**ALL CROPS: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION.**

## WEED LIST

Common name	Scientific name
Canola (rape)	<i>Brassica napus</i>
Capeweed	<i>Arctotheca calendula</i>
Charlock	<i>Sinapis arvensis</i>
Chickweed	<i>Stellaria media</i>
Common Sowthistle (milk thistle)	<i>Sonchus oleraceus</i>
Corn Gromwell	<i>Buglossoides arvensis</i>
Cowvine	<i>Ipomoea lonchophylla</i>
Crassula	<i>Crassula</i> spp.
Deadnettle	<i>Lamium amplexicaule</i>
Dense-flower Fumitory	<i>Fumaria densiflora</i>
Dock	<i>Rumex</i> spp.
Doublegee (Spiny Emex)	<i>Emex australis</i>
Fat Hen	<i>Chenopodium album</i>
Fireweed	<i>Senecio</i> spp.
Fumitory	<i>Fumaria</i> spp.
Hedge Mustard	<i>Sisymbrium officinale</i>
Hexham Scent (King Island Melilot)	<i>Melilotus indicus</i>
Horehound	<i>Marrubium vulgare</i>
Hyssop Loosestrife	<i>Lythrum hyssopifolia</i>
Iceland	<i>Mesembryanthemum</i> spp.
Indian Hedge Mustard	<i>Sisymbrium orientale</i>
London Rocket	<i>Sisymbrium irio</i>
Long Storksbill	<i>Erodium botrys</i>
Marshmallow	<i>Malva parviflora</i>
Mouse-eared Chickweed	<i>Cerastium glomeratum</i>
Night-scented Stock	<i>Matthiola longipetala</i>
Paterson's Curse	<i>Echium plantagineum</i>
Peppercress	<i>Lepidium</i> spp.
Prickly Lettuce	<i>Lactuca serriola</i>
Purple Goosefoot	<i>Scleroblitum atriplicinum</i>
Rough Poppy	<i>Papaver hybridum</i>
Saffron Thistle	<i>Carthamus lanatus</i>
Scarlet Pimpernel	<i>Anagallis arvensis</i>
Shepherd's Purse	<i>Capsella bursa-pastoris</i>
Skeleton Weed	<i>Chondrilla juncea</i>
Sorrel	<i>Rumex</i> spp.
Stemless Thistle	<i>Onopordum acaulon</i>
Toad Rush	<i>Juncus bufonius</i>
Tree Hogweed	<i>Polygonum patulum</i>
Turnip Weed	<i>Rapistrum rugosum</i>
Variegated Thistle	<i>Silybum marianu</i>

Common name	Scientific name
Vetch (Tares)	<i>Vicia sativa</i>
Volunteer Lupins	<i>Lupinus</i> spp.
Ward's Weed	<i>Carrichtera annua</i>
Wild Radish	<i>Raphanus raphanistrum</i>
Wild Turnip	<i>Brassica tournefortii</i>
Wireweed (Hogweed)	<i>Polygonum aviculare</i>

## GENERAL INSTRUCTIONS

### RESISTANT WEEDS WARNING

GROUP **F I** HERBICIDE

APPARENT Panther Selective Herbicide is a member of the phenoxy and nicotinamide groups of herbicides and acts by inhibiting carotenoid biosynthesis at the phytoene desaturase step (PDS inhibitors) and disrupting plant cell growth. For weed resistance management APPARENT Panther Selective Herbicide is both a Group F and a Group I herbicide. Some naturally occurring weed biotypes resistant to APPARENT Panther Selective Herbicide and other Group F and 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 APPARENT Panther Selective Herbicide or other Group F or Group I herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, AIRR APPARENT Pty Ltd accepts no liability for any losses that may result from the failure of APPARENT Panther Selective Herbicide to control resistant weeds.

### TOLERANCE

Some pre-emergence herbicides, such as atrazine, can cause stress to certain crops resulting in an increase in crop damage when using this product. Subterranean clover is particularly sensitive.

### CEREALS

After application some transient crop yellowing may occur. This usually appears as yellow or white banding on leaves. Provided the crop is not under stress from pre-emergent herbicide, root disease, insect damage, frost, dry or excessively moist conditions, the development of the crop and subsequent growth will be unaffected.

Warning (Oats): The tolerance of oat varieties Esk and Nile (the two main varieties grown in Tasmania) to APPARENT Panther Selective Herbicide has not been tested. Test a small area of crop before using APPARENT Panther Selective Herbicide over large areas. Consult your local AIRR APPARENT representative for advice on specific varieties.

### PASTURE

The tolerance of clover varieties to APPARENT Panther Selective Herbicide can vary with rate of application, soil type, crop health, stage of growth and degree of moisture and temperature stress.

**Warning:** APPARENT Panther Selective Herbicide may result in transient crop yellowing and suppression of growth with a resultant initial reduction in dry matter, particularly at rates in excess of 500mL/ha and in areas of double spray. For this reason we recommend application prior to the 8 trifoliolate leaf stage. However, at the lower rates (500mL/ha and less) and under normal growing conditions, subsequent growth and seed yield should not be affected. Under normal growing conditions, the following varieties have shown acceptable levels of foliage tolerance to APPARENT Panther Selective Herbicide applied at 500mL/ha:

**ArrowLeaf:** Zulu

**Balansa:** Paradana

**Berseem:** Sacromonte

**Persian:** Kyambro, Lupers, Maral

**White:** Haifa

**Subterranean Clover:** Daliak, Daikeith, Denmark, Esperance, Geraldton, Goulburn, Karridale, Larissa, Leura, Mt.Barker, Nungarin, Rosedale, Seaton Park, Trikkala and Woogenellup.

The effects of this product on clover seed yield have been tested on the following varieties. Under normal growing conditions they show acceptable levels of tolerance to this product applied at 500mL/ha:

**Subterranean Clover:** Esperance, Goulburn, Larissa, Seaton Park and Trikkala.

**Warning:** Rose and Strawberry clover have shown increased sensitivity to APPARENT Panther Selective Herbicide. APPARENT Panther Selective Herbicide may affect the seed yield of Subterranean Clover variety Woogenellup. Some pasture grasses, including Phalaris and Cocksfoot, may show some initial reduction in vegetative growth after application of APPARENT Panther Selective Herbicide. Care should be exercised if sensitive clover varieties or grasses are included in the pasture sward.

Varieties not listed should be tested before using APPARENT Panther Selective Herbicide over large areas. Consult your local AIRR APPARENT representative for advice on specific varieties.

## SUBSEQUENT CROPS

To reduce effect on subsequent susceptible crops (e.g. canola), ensure thorough cultivation of soil prior to the sowing of these crops.

## MIXING

To ensure even mixing, half fill the spray tank with clean water and add the required amount of product. Agitate thoroughly then add the remainder of the water. Agitate again before spraying commences. Reseal part-used product container immediately after use. Spray mixtures containing APPARENT Panther Selective Herbicide should not be left to stand overnight. Prolonged periods of exposure to cold temperatures could result in settling out of the product in the mixture.

**Warning:** The rubber components present in some spraying units may be affected by exposure to the solvents in APPARENT Panther Selective Herbicide and some other agricultural products. To reduce this risk it is recommended that the spray unit be thoroughly washed with a boom cleaner and fresh water after use. Contact the spray unit manufacturer to determine the suitability of the rubber components for use with agricultural products.

## APPLICATION

**Boom Sprayer:** A minimum of 50L of water per hectare should be used, however, for optimum results water rates of 70-100L/ha are recommended. Increase the water volume if weed infestation is heavy or crop cover is dense. Complete coverage of weeds is essential.

**Aircraft (NSW, Vic, SA only):** Apply in a minimum of 30L water per hectare. Effective weed control will only be achieved where good coverage of leaf surface is achieved.

## COMPATIBILITY

The following products are physically compatible with APPARENT Panther Selective Herbicide as a two-way mixture in the spray tank but should only be used for the crops specified:

Crop	APPARENT Panther Selective Herbicide	Compatible Product
Wheat, triticale and cereal rye only	Up to 750mL/ha	Hoegrass* (also barley), Tristar* Advance (1.5L rate only), Wildcat* (wild oats only)
Cereals (including undersown)	All rates	Chlorpyrifos (500g/L), dimethoate, Thiodan*
Cereals (not undersown)	Up to 500mL/ha	Alyl*, Glean*, MCPA LVE, Logran*
	All rates	Bromoxynil (200g/L), 2,4-D Amine 500 Herbicide, Lontrel*, Tordon* 50-D, Cadence* (up to 115g only), Eclipse*
Wheat, barley, triticale, and cereal rye only (not undersown)		Achieve*
Wheat only (not undersown)		Topik*
Clover	Up to 750mL/ha	Targa*, Fusilade*
Subterranean Clover		Simazine (500g/L), simazine (500g/L) + paraquat (200g/L) mixture
	Up to 1.0L/ha	2,4-DB amine (500g/L)

When mixing with other herbicides, crop yellowing may be enhanced. When mixing with Hoegrass, Wildcat or Tristar Advance some reduction in the efficacy and speed of action of these products may occur. If the crop is stressed, the application of the herbicide tank-mixtures may cause yield reduction. When mixing with Cadence a temporary wilting may be evident in some crops after application. Growers should seek advice before spraying recently released cereal varieties.

Use the recommended rates for both herbicides in the tank-mixture as well as the surfactant recommendation of the grass herbicide. If another herbicide is applied as a tank mix, observe the plantback restrictions on that label.

DO NOT add surfactant when mixing APPARENT Panther Selective Herbicide and Alyl.

**Simazine:** Refer to the simazine label for correct application rates, especially with regard to soil types. This product may be mixed in the spray tank with one of the following insecticides according to the directions for use on this product: Hallmark\* 50EC, Dominex\* 100EC, Karate\*, Decis Options\* and Talstar\*.

**Warning:** DO NOT use crop oils with APPARENT Panther Selective Herbicide or APPARENT Panther Selective Herbicide tank mixtures with other products in cereals. As formulations of other manufacturer's products are beyond the control of AIRR APPARENT Pty Ltd, all mixtures should be tested prior to mixing commercial quantities.

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

DO NOT apply under weather conditions, or from spraying equipment, that may cause drift onto nearby susceptible plants/crops, cropping lands or pastures. Avoid spray drift and vapour movement onto susceptible crops such as cotton, tobacco, tomatoes, vines, lupins, fruit trees and ornamentals.

## PROTECTION OF LIVESTOCK

Grazing Precaution: Sprayed weeds may become more palatable to stock and a higher intake of some weeds may result in stock poisoning and death from causes such as nitrate poisoning.

Care should be taken especially where Capeweed, Paterson's Curse and variegated thistles predominate in the pasture. Avoid grazing with young or breeding stock.

DO NOT graze horses or pigs on Paterson's Curse. If in doubt, contact your nearest Department of Agriculture.

## PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Dangerous to fish. DO NOT contaminate streams, rivers or watercourses with the chemical or used containers.

## STORAGE AND DISPOSAL

Store in the original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Triple 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 deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.

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

## SAFETY DIRECTIONS

Harmful if swallowed. Will damage the eyes. Will irritate the skin. Avoid contact with eyes and skin. DO NOT inhale vapour. When opening the container, preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist, washable hat, elbow-length PVC gloves and face shield or goggles. If product in eyes, wash it out immediately with water. 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, face shield or goggles and contaminated clothing.

## FIRST AID

If poisoning occurs contact a doctor or Poisons Information Centre. Phone Australia 131126, New Zealand 0800 764 766. If swallowed, DO NOT induce vomiting. Give a glass of water. If in eyes, wash out immediately with water.

## SAFETY DATA SHEET

For further information, refer to Safety Data Sheet (SDS) which is available from the supplier.

## **CONDITIONS OF SALE**

The use of Apparent Panther Selective Herbicide being beyond the control of the manufacturer no warranty expressed or implied is given by AIRR Apparent Pty Ltd regarding its suitability, fitness or efficiency for any purpose for which it is used by the buyer, whether in accordance with the directions or not and AIRR Apparent Pty Ltd accepts no responsibility for any consequence whatsoever resulting from the use of this product.

\* Other trademarks