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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,
25 g/L DIFLUFENICAN


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

GROUP F I I HERBICIDE

For the control of broadleaf weeds in winter cereals and clover as specified in Directions for Use Table.
IMPORTANT: Read the attached booklet before use.

APVMA Approval No. 66925/58511

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WEED LIST
WEED

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>Fumitory</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>
Iceplant	<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>

Common Name	Scientific Name
Mouse-eared Chickweed	<i>Cerastium glomeratum</i>
Night-scented Stock	<i>Matthiola longipetala</i>
Patterson'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>
Variogated Thistle	<i>Silybum marianum</i>
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>

DIRECTIONS FOR USE

RESTRAINTS

DO NOT apply to crops or weeds which 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	
CEREALES Wheat, Barley, Oats, Triticale, Cereal Rye (including cereals undersown with clover)	Wild Radish	Up to the 2 leaf stage and not more than 60 mm in diameter	WA only	
		Up to the 4 leaf stage and not more than 120 mm in diameter	All States	
		Up to the 6 leaf stage and not more than 150 mm in diameter		
		Up to the 8 leaf stage and not more than 180 mm in diameter		
	PASTURE Newly Sown and Established Clover-based pasture, Clover for Hay and Seed Production	Charlock, Hedge Mustard, Indian Hedge Mustard, Shepherd's Purse, Turnip Weed, Wild Turnip	Up to the 2 leaf stage and not more than 60 mm in diameter	
			Up to the 4 leaf stage and not more than 120 mm in diameter	
			Up to the 6 leaf stage and not more than 150 mm in diameter	
		London Rocket	Up to the 5 leaf stage and not more than 120 mm in diameter	Qld only
		Ward's Weed		SA only
	Capeweed	Up to the 2 leaf stage and not more than 60 mm in diameter	All States	
		Up to the 4 leaf stage and not more than 120 mm in diameter		
	Crassula	Up to the 2 leaf stage		
		Up to the 4 leaf stage		
	Prickly Lettuce	Up to the 2 leaf stage		
Up to the 4 leaf stage				
Up to the 6 leaf stage				
Dense-flower Fumitory	Up to the 2 leaf stage			
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	Cotyledon to 2 leaf	NSW only (west of Newell Hwy).		
Wild Turnip		SA only (Eyre peninsula north of the line between Venus Bay and Cowell)		
CEREALES Wheat, Barley, Oats, Triticale, Cereal Rye	Fumitory	2 – 6 leaf stage	All States	

Rate/ha	Critical Comments
250 mL	CROP STAGE Cereals
500 mL	Up to 750 mL (3 leaf to late tillering stage – Z13 to 30) Over 750 mL (5 leaf to late tillering stage – Z15 to 30)
750 mL	Optimum results are achieved when sprayed at 3-5 leaf crop stage (generally 4-8 weeks post sowing).
1.0 L	WA only: DO NOT apply to Barley or Kulin Wheat before the 5 leaf stage (Z15).
500 mL	Warning: Apparent Panther may cause transient crop yellowing of cereals. Some varieties of oats have not been tested. (Refer to ' Crop Tolerance ' section of General Instructions).
750 mL	Application is recommended prior to the eighth trifoliolate leaf stage, however, applications prior to the third leaf stage may result in crop damage especially under stressed conditions and in sandy soils.
1.0 L	DO NOT apply to Annual Medics or Lucerne. Warning: Apparent Panther 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).
750 mL	WEED STAGE 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:
500 mL	<ul style="list-style-type: none"> • High crop and weed density • Late season germinations
1.0 L	<ul style="list-style-type: none"> • Abnormal weed growth (including early flowering), high rate of product (up to the maximum rate of application specified for that weed) may be required.
500 mL	Apparent Panther will not effectively control:
750 mL	<ul style="list-style-type: none"> • Regrowth of suppressed weeds;
500 mL	<ul style="list-style-type: none"> • Transplanted weeds;
750 mL	<ul style="list-style-type: none"> • Regrowth from rhizomes or roots;
1.0 L	<ul style="list-style-type: none"> • Weeds growing under stress from previous herbicide applications.
750 mL	GRAZING:
1.0 L	Efficacy on larger weeds will be improved by grazing with normal levels of stock after 7 day withholding period. Refer to 'Protection of Livestock' for grazing precautions.
1.0 L	APPLICATION
1.0 L	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.
500 mL	WILD RADISH
350 mL	Apparent Panther will provide residual control of Wild Radish for up to 4 weeks after application. Effective residual activity of this product may be reduced where:
500 mL + 200 mL terbutryn (500 g/L)	<ul style="list-style-type: none"> • Rates lower than 1.0 L/ha are used; • Dry conditions prevail; • Poor coverage of the soil surface is achieved; • Crop is planted in non-wetting sand; • Soils contain a high content of organic matter.
	Optimum results will be obtained if good soil moisture exists at and after application.

SUPPRESSION OF THE FOLLOWING WEEDS

Crop	Weeds Controlled	Stage of Weed Growth	State
CEREALS Wheat, Barley, Oats, Triticale, Cereal Rye (including cereals undersown with clover)	Saffron Thistle Chickweed, Fireweed, Hexham Scent (King Island Mellilot), Iceplant, Mouse-eared Chickweed, Night-scented Stock, Paterson's Curse, Peppergrass, Skeleton Weed, Long Storksbill, Volunteer Lupins	Up to the 6 leaf stage Up to the 4 leaf stage	All States
PASTURE Newly Sown and Established Clover-based pasture, Clover for Hay and Seed Production	Wireweed (hogweed) Common Sowthistle (Milk Thistle), Cowwine, 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	
Wheat, Barley, Oats, Triticale, Cereal Rye	Wild Radish	Up to the 4 leaf stage and not more than 120 mm in diameter	
		Up to the 6 leaf stage and not more than 150 mm in diameter	
		Up to the 8 leaf stage and not more than 180 mm in diameter*	

Rate/ha	Critical Comments
1.0 L	Refer to critical comments in the previous section.
750 mL	
1.0 L	
350 mL plus 200 mL L.V.E. MCPA (500 g/L)	Refer also to all Critical Comments relating to weed stage, grazing, application and wild radish above. *Reduced efficacy (suppression only) may be achieved on wild radish larger than 8 leaf or greater than 180 mm in diameter. DO NOT use this tank-mix if cereals are undersown with lucerne or annual medics. Crop Stage Apparent Panther 350 mL + Apparent MCPA 570 LVE 200 mL: Apply from 3 leaf to fully tillered (Zadoks Z13 to Z30). Apparent Panther 500 mL + Apparent MCPA 570 LVE 200 mL: Apply from 3 leaf to fully tillered (Zadoks Z13 to Z30). Apparent Panther 500 mL + Apparent MCPA 570 LVE 400 mL: Apply from 5 leaf stage to fully tillered (Zadoks Z15 to Z30). Optimum results are achieved when sprayed at 3-5 leaf crop stage (generally 4-8 weeks post-sowing). WA only: DO NOT apply to Barley or Kulin Wheat before the 5 leaf stage (Z15). Warning: Apparent Panther 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 L.V.E. MCPA product label.
500 mL plus 200 mL L.V.E. MCPA (500 g/L)	
500 mL plus 400 mL L.V.E. MCPA (500 g/L)	

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

WITHHOLDING PERIOD:

Crop Harvest: **NOT REQUIRED WHEN USED AS DIRECTED.**
 All Crops: **DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION**

GENERAL INSTRUCTIONS

RESISTANT WEEDS WARNING

GROUP F III HERBICIDE

Apparent Panther Selective Herbicide is a member of the phenoxy and nicotinanalide groups of herbicides and acts by inhibiting carotenoid biosynthesis and disrupting plant cell growth. For weed resistance management Apparent Panther is both a Group F and a Group I herbicide. Some naturally occurring weed biotypes resistant to Apparent Panther and other Group F and Group I herbicides may exist through normal genetic variability in and weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by Apparent Panther or other Group F or Group I herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Apparent Pty Ltd accepts no liability for any losses that may result from the failure of Apparent Panther 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. Sub-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 varieties Esk and Nile (the two main varieties grown in Tasmania) to Apparent Panther has not been tested. Test a small area of crop before using Apparent Panther over large areas. Consult your local Apparent Pty Ltd representative for advice on specific varieties.

Pasture

The tolerance of clover varieties to Apparent Panther 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 500 mL/ha and in areas of double spray. For this reason application is recommended prior to the 8th trifoliate leaf stage. However, at the lower rates (500 mL/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 applied at 500 mL/ha:

ArrowLeaf: Zulu
Balansa: Paradana
Berseem: Sacromonte
Persian: Kyambro, Lupers, Maral
White: Haifa

Subterranean Clover: Daliak, Dalkeith, Denmark, Esperance, Geraldton, Goulburn, Karridale, Larissa, Leura, Mt. Barker, Nungarin, Rosedale, Seaton Park, Trikkala and Woogenellup. The effects of Apparent Panther on clover seed yield have been tested on the following varieties. Under normal growing conditions they show levels of tolerance to Apparent Panther applied at 500 mL/ha.

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

Warning

Rose and Strawberry clover have shown increased sensitivity to Apparent Panther. Apparent Panther may affect the seed of yield of subterranean variety Woogenellup. Some pasture grasses, including Phalaris and Cockfoot, may show some initial reduction in vegetative growth after application of Panther. 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 over large areas. Consult your local Apparent Pty Ltd representative for advice on specific varieties.

Subsequent Crops

To reduce effect on 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 should not be left to stand overnight. Prolonged periods of exposure to cold temperature 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 and some other agricultural products. To reduce the 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 50 L of water per hectare should be used, however, for optimum results water rates of 70-100 L/ha are recommended. Increase the water volume if weed infestation is heavy or crop cover is dense. Complete coverage of weeds is essential.

Selective Herbicide

Aircraft (NSW, Vic, SA only)

Apply in a minimum of 30 L water per hectare. Effective control will only be achieved where good coverage of leaf surface is achieved.

Compatibility

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

Crop	Panther	Compatible Product
Wheat, triticale and cereal rye only	Up to 750 mL/ha	Apparent Diclofop-methyl 500, Fenoxaprop-p-ethyl
Cereals (including undersown)	All rates	Apparent Dingo (Chlorpyrifos 500 g/L), Apparent Dimethoate 400 g/L
Cereals (not undersown)	Up to 500 mL/ha	Apparent Metsulfuron, Apparent Chlorsulfuron, Apparent MCPA 570 LVE, Apparent Triasulfuron
	All rates	Apparent Bromoxynil 200, Apparent 2,4-D 625 Amine, Apparent Ramjet 75-D (2,4-D + Picloram), dicamba (900 g/kg)
Wheat, Barley, Triticale, and Cereal Rye only (not undersown)		Apparent Tralkoxydim
Wheat only (not undersown)		Apparent Clodinafop 240
Clover	Up to 750 mL/ha	Apparent Quizalofop 200, Apparent Salvo (Fluazifop 212)
Sub clover	Up to 1.0 L/ha	Simazine Liquid, Simazine Liquid + Apparent Paraquat 250 mixture 2,4-DB amine (500 g/L)

When mixing with other herbicides, crop yellowing may be enhanced. When mixing with Apparent Diclofop-methyl 500 and Fenoxaprop-p-ethyl 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 dicamba dry 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 and Apparent Metsulfuron.

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 the product: Apparent Alpha-cypermethrin 100, Apparent Deltamethrin Duo, Lambda-cyhalothrin 250, Apparent Stockade (Bifenthrin 250).

Warning

DO NOT use crop oils with Apparent Panther or Apparent Panther mixtures with other products in cereals. As formulations of other manufacturer's products are beyond the control of 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 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 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. The method of disposal of the container depends on the container type. Read the 'Storage and Disposal' statement on the label that is attached to the container.

SAFETY DIRECTIONS

Harmful if swallowed. Will damage eyes. Will irritate the skin. Avoid contact with eyes and skin. When opening the container and preparing 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 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 13 11 26. 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 the Safety Data Sheet (SDS), which can be obtained 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 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 Apparent Pty Ltd accepts no responsibility for any consequence whatsoever resulting from the use of this product.