

# **POISON**

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

Nufarm

# Surpass<sup>®</sup> 475

Herbicide

# ACTIVE CONSTITUENT: 475 g/L 2,4-D present as the dimethylamine + diethanolamine salts

GROUP

**HERBICIDE** 

For the control of emerged broadleaf weeds prior to sowing crops and pastures in conservation tillage situations and for selective weed control in crops and situations detailed in the Directions for Use. Formulated for use with Roundup PowerMAX®, Roundup® CT and other glyphosate products.

This is a PHENOXY HERBICIDE that can cause severe damage to susceptible crops such as cotton, grapes, tomatoes, oilseed crops and ornamentals.

# READ COMPLETE DIRECTIONS FOR USE BEFORE USING THIS PRODUCT.

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APVMA Approval No.: 61515/51803

# DIRECTIONS FOR USE RESTRAINTS

DO NOT spray if rain seems likely within 6 hours or if strong winds prevail.

DO NOT apply if crop or weeds are stressed due to dry or excessively moist conditions.

DO NOT use when breeze is blowing towards nearby susceptible plants.

### 1. CONSERVATION TILLAGE

#### REFER TO SECTION "SPRAY APPLICATIONS AND DRIFT RISK ASSESSMENT" BEFORE APPLICATION

SITUATION & CROP	WEEDS	STATE	RATE	CRITICAL COMMENTS
Preparatory spray for Fallows and Seedbeds or prior to sowing the following Crops: Balansa Clover, Barley, Chickpeas, Cotton, Faba beans, Field peas, Lentils, Linseed, Lucerne, Lupins, Narbon beans, Navybeans, Oats, Perennial ryegrass, Persian clover, Phalaris, Rapeseed, Rice, Safflower, Sorghum, Soybean, Subterranean clover, Sunflower, Triticale, Vetch, Wheat, White clover	Fumitory (white), Ball mustard, Indian hedge mustard, Common sowthistle, Turnip weed, Wild turnip, Wild radish.  Seedlings of: Australian bindweed, Bellvine, Caltrop, New Zealand spinach, Raspweed  Ageratum (Blue top), Dock, Volunteer lupins, Volunteer peas, Volunteer Sunflowers, Charlock, Fumitory (Red), Medic, Paterson's curse, Prickly lettuce (Wild lettuce), Saffron thistle, Spear thistle, Variegated thistle  Bathurst burr, Blackberry nightshade, Californian burr, Horehound seedlings, Lincoln weed seedlings, Marshmallow seedlings, Sorrel seedlings, Thomapple, Volunteer vetch, Volunteer safflower, Common ice-plant, Storksbill/Erodium seedlings, Ivyleaf Speedwell, Melilotus, Shepherd's purse, Skeleton weed (Suppression only), Ward's weed, Wireweed seedlings (Hogweed), White clover, Sub-Clover	All States  NSW, ACT, Qld only  All states	415mL-1.2L/ha plus Roundup PowerMAX® or Glyphosate CT or Credit® Broadhectare Herbicide plus Bonus® or Roundup® CT or Weedmaster® Duo at recommended label rates  570mL-760L/ha plus Roundup PowerMAX® or Glyphosate CT or Credit® Broadhectare Herbicide plus Bonus® or Roundup® CT or Weedmaster® Duo at recommended label rates  760mL-1.1L/ha plus Roundup PowerMAX® or Glyphosate CT or Credit® Broadhectare Herbicide plus Bonus® or Roundup® CT or Weedmaster® Duo at recommended label rates	RATE SELECTION: Use the lower rate for seedling broadleaf weeds and increase to the higher rate for broadleaf weeds more than 10cm diameter/high. Always add the mixture product at recommended label rates. At the time of application, all weeds must be actively growing and not under stress from low moisture, frost, cold, disease or water-logging. If grazing has occurred allow regrowth to 6-8cm before spraying and use higher rate. Always add either a non-ionic surfactant (eg. Activator® or LI 700®) in accordance with label directions on the mixture product. Use LI 700 with the mixture product if insecticides will be included in the tank mixture or if faster brown out of weeds is required.
	Amaranth, Apple of Peru, Mexican poppy, Annual ground cherry, Bladder ketmia, Fat hen, Melons, Native Rosella, Noogoora burr, Potato weed, Cow vine, Yellow vine, Rapeseed.	NSW, ACT, Qid only	1.1-1.7L/ha plus Roundup PowerMAX® or Glyphosate CT or Credit® Broadhectare Herbicide plus Bonus® or Roundup® CT or Weedmaster® Duo at recommended label rates	

SITUATION & CROP	WEEDS	STATE	RATE	CRITICAL COMMENTS
(continued)	Volunteer canola (Brassica napus) including Roundup Ready® varieties	All States	1.3L/ha or 1.8L/ha plus Roundup PowerMAX® or Glyphosate CT or Credit® Broadhectare plus Bonus® or Roundup® CT or Weedmaster® Duo at recommended rates	Use lower rate of Surpass 475 up to the 4 leaf weed stage. Use higher rate of Surpass 475 up to the 6 leaf weed stage. In situations where the PRAMOG model recommends no use of glyphosate in the year following Roundup Ready canola, alternative mode of action herbicides should be selected.
PASTURES: Conservation Tillage- Direct Drilling, Surface Sowing or Fallow	Charlock, Mustards, Shepherd's purse, Saffron, Slender, Spear & Variegated thistles, Turnip weed, Wild radish, Wild turnip	All States	695mL-2.1L/ha	Apply to actively growing young weeds before sowing. Observe plant back periods given in the table on this leaflet.
Maintenance	Clover, Sorrel		1.45L/ha plus 280-400mL/ha Kamba® 500	Apply to actively growing plants in Autumn. DO NOT sow pasture seed for at least 30 days after application.

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# 2. FIELD CROPS

# REFER TO SECTION "SPRAY APPLICATIONS AND DRIFT RISK ASSESSMENT" BEFORE APPLICATION.

SITUATION & CROP	WEEDS	STATE	RATE	CRITICAL COMMENTS
Wheat	Refer Weed Table	NSW, ACT,	425mL-1.8L/ha	Apply after the first node can be felt at the base of a
Barley		SA, Vic, Qld,	Refer to weed table	tiller and before swelling of the head can be felt in a
Cereal Rye, Triticale		Tas only	for specific rates in	tiller (NSW, ACT, SA only). Apply from tillering to
Oats		NSW, ACT, SA, Vic, Qld only	each state	boot stage (Vic only). Apply from mid-tillering to before boot stage (Qld only). Apply at 5 leaf to fully tillered (Tas only).
Cereals: Wheat, Oats,	Cape tulip	WA only	885mL-1.65L/ha	Apply from the 5 leaf stage up to jointing stage
Barley	Dock, Saffron thistle	1	1.45L/ha	(Z15-33). Apply after the 6 leaf stage (Z16) for
	Indian hedge mustard, London		1L/ha	cranbrook, jacup, aroona and spear wheat and
	rocket, Lupin, Rapistrum, Wild			mortlock oats to avoid possible damage. DO NOT
	radish			spray if lucerne is present.
	Wild turnip		885mL/ha	WEED STAGE: 10-15cm. Docks should be sprayed before 5 leaf stage. Cape tulip – low rate for cormils only.
	Capeweed, Doublegee,		235mL/ha plus	Apply when crop has 4-5 leaves and most weeds
	Erodium, London rocket, Lupin,		500mL/ha Nufarm	have germinated and are in 2-5 leaf stage. Crop and
	Mustard, Rapistrum, Wild radish,		Flowable Diuron	weeds should be dry at time of application. Some
	Wild turnip			temporary yellowing of crop may occur after
				application. Undersown sub-clovers may be slightly retarded. DO NOT apply to undersown medics.
Wheat, Barley	Wild radish	NSW, ACT,	105mL/ha plus	Spray 2-6 weeks after sowing and not later. DO
		SA, Vic only	850g/ha Tribunex* Herbicide	NOT use on crops undersown with lucerne.
Cereals: Wheat, Oats,	Volunteer canola (Brassica	All States	1.3L/ha	Weed stage: Up to 4 leaf.
Barley, Triticale, Cereal rye	napus) including Roundup Ready® varieties		1.8L/ha	Weed stage: Up to 6 leaf.
Fallow, Stubble Spray	Volunteer canola (Brassica		1.3L/ha	Weed stage: Up to 4 leaf.
prior to Direct Drilling or Sowing	napus) including Roundup Ready® varieties		1.8L/ha	Weed stage: Up to 6 leaf.
a) Winter Cereals	Refer Weed Table	Vic only	295mL-1.8L/ha	Observe plant back periods given in the table on
		NSW, ACT	760mL-2.2L/ha	this booklet. Can be mixed with Lusta®, Glean*,
		only		Nuquat® or Revolver® where grasses are present.
b) Winter Cereals and		Qld only		l
Peanuts				For skeleton weed, spraying should only be done
				6-8 weeks before anticipated sowing date and
Millet	_	NSW, ACT,	760mL-1.45L/ha	subsequent cultivation limited to a minimum.  Spray when secondary roots have developed, when
Willet		SA, Vic only	/60ML-1.45L/na	fully tillered and before heads start to format the
		Qld only	760mL-1.1L/ha	base of the tillers. DO NOT use on Panorama or
		,		Panicum.
Saccaline, Broom millet,	Cape tulip, Dock, Saffron thistle,	WA only	1.45L/ha	Spray when crop is 10-30cm high and secondary
Millet	Indian hedge mustard, London			roots have developed and before tasselling. Apply
	rocket, Lupin, Rapistrum,			as direct spray to weeds.
Cugar Cana	Radish, Wild turnip	Old onl:	221 461 //	Add CO 100ml Nufarm Activists to 1001 of access
Sugar Cane	Bindy eye (Star burr), Bluetop, Cobblers pegs, Fleabanes, Jute,	Qld only	2.3L-4.6L/ha	Add 60-120mL Nufarm Activator to 100L of spray mixture. Agitate well.
	Leucas, Needle burr, Spear			mixture. Ayıtate well.
	thistle, Water primrose, Ipomea			DO NOT use on Q63, Q67, Q80 or Q96 varieties.
	vines, Convolvulus vines			DO NOT use on Qos, Qor, Qoo or Qoo varieties.
	Chinese mint, Blue snakeweed	1	4.6L/ha	1
	Omnose mint, Dide snakeweed		T.UL/11a	

# 2. FIELD CROPS (continued)

# REFER TO SECTION "SPRAY APPLICATIONS AND DRIFT RISK ASSESSMENT" BEFORE APPLICATION.

SITUATION & CROP	WEEDS	STATE	RATE	CRITICAL COMMENTS
Peanuts	Broadleaf weeds except Noogoora burr, Grasses except Mossman burr	Qld only	2.3L or 4.75L/ha	LOWER RATE: Apply as BAND SPRAY as soon as possible after planting in a 55cm band. HIGHER RATE: Apply as OVERALL SPRAY after planting and before crop emergence. Some crop damage may occur if heavy rain falls between application and crop emergence.
Harvest Aid or Salvage Spray- Winter Cereals	Desiccate Broadleaf weeds	All States	1.6-2.15L/ha	Apply after dough stage.

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# 3. PASTURES, NON AGRICULTURAL, RIGHTS OF WAY, INDUSTRIAL, LAWNS REFER TO SECTION "SPRAYAPPLICATIONS AND DRIFT RISK ASSESSMENT" BEFORE APPLICATION.

SITUATION & CROP	WEEDS	STATE	RATE	CRITICAL COMMENTS
Pastures & non agricultural	Refer Weed Table	NSW, ACT, Qld, SA, Tas only	695mL-2.2L/ha	Pasture legumes including lucerne, clovers, and medics may be damaged unless well protected by grasses. Spot spraying is preferred.
	Amsinckia, Docks, Bindweed, Caltrop, Flatweed, Spear thistle, Capeweed, Doublegee, Saffron thistle, Mustard, Wild radish, Wild turnip, Annual thistles, Paterson's curse	WA only	1.45L/ha	For pastures not containing legumes. Only seedling docks, spear thistles and saffron thistle will be controlled.
	Afghan melons		2.1L/ha plus 1% crop oil	Spray when plants are actively growing preferably before flowering or vining.
	Paddy melons		1-1.45L/ha	
	Prickly saltwort (Roly poly)		2.1L/ha	Spray when plants are small.
	Stinkwort		2.1L-4.2L/ha plus surfactant	Best results are obtained when plants are small. Use high rate on larger plants.
	Dove weed		4.2L/ha	Spray after good emergence of seedlings.
Pastures, Rights of Way	Boxthorn, Boneseed, Hawthorn	Vic, SA only	105mL/10L water	Spot spraying. For boneseed only, thoroughly wet plants or seedlings
& Industrial	Groundsel	NSW, ACT, Qld, SA only	1.3L/15L water	MISTING: Lightly wet plants.
			380mL/100L water	HIGH VOLUME: Thoroughly wet plants.
			315mL/15L water	CUT STUMP: Swab the cut stump within one hour of cutting.  Apply by a pouring can or knapsack spray.
			3.8-5.7L/ha	AERIAL APPLICATION: Spray when groundsel is actively growing.
	Lantana		380mL/100L water	Use a coarse spray with sufficient pressure to penetrate canopy and wet stems as well as foliage. Spray at the end of a wet Summer (March to May). Defoliation should occur but respraying of new growth will be necessary in the following Autumn. Broadcast grass seed and keep stock off following Summer to allow the pasture to establish. Damage may result to pasture legumes.
	Mother of millions	NSW, ACT, only	520mL/100L water	Hand gun and Knapsack only: a thorough coverage of leaves and plantlets is necessary. Use Nufarm Chemwet 1000 at the rate of 1.0mL of surfactant per 1L of mixture.
	Noogoora burr, Weir vine (Ipomea)	Qld only	210mL/100L water	In all cases apply to young, actively growing weeds, ensuring
	Annual & Perennial pigweed, Artichoke thistle, Bathurst burr, Billygoat weed, Blue snakeweed, Burr medic, Clockweed#, Fleabanes, Galvanised burr, Hemlock, Hoary cress, •Kyalinga weed (Whisker Grass), Knobweed, Milky cotton bushes, Parthenium weed, Paterson's curse, Saffron thistle, Star burr, Thomapple,		380mL/100L water	thorough coverage. # Spray rosette stage •Repeat spraying if necessary
	Variegated thistle#	4	040 1 (40)	
	Rubber vine		210mL/10L water	Apply to freshly cut stump.

WEEDS

SITUATION &

CROP

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STATE	RATE	CRITICAL COMMENTS
		Precaution: An increased quantity of poisonous plants may be eaten by stock using spray-graze eg. Caltrop, Capeweed, Paterson's curse and Variegated thistle and deaths could result from causes such as nitrate poisoning. With Paterson's curse, preferably graze stock soon destined for slaughter and avoid extended period of grazing. Avoid grazing with young or

Pastures - Spray/Graze Techniques)	Amsinckia, thistles, Capeweed, Doublegee, Mustard, Paterson's curse, Wild turnip, Wild radish,	SA only	695mL/ha	Precaution: An increased quantity of poisonous plants may be eaten by stock using spray-graze eg. Caltrop, Capeweed, Paterson's curse and Variegated thistle and deaths could result from causes such as nitrate poisoning. With Paterson's curse, preferably graze stock soon destined for slaughter and avoid extended period of grazing. Avoid grazing with young or breeding stock. DO NOT graze horses or pigs on Paterson's curse.  Apply from 6 weeks after opening rains in Autumn until the end of August. Seven days after spraying stock paddock at 4-5 times normal rate, preferably with sheep. Maintain this level of grazing
	Docks, Geranium, Erodium  Annual thistles, Capeweed, Doublegee, Mustards, Paterson's curse, Turnip, Saffron thistle, Spear thistle	Tas, Vic only		for 6 weeks or until pasture shows signs of over grazing. Then return to normal stocking levels. Use high stocking rates in following Spring to prevent weeds from flowering. Repeat treatments may be required for 2-3 years for complete control.
	Amsinckia, Docks (seedling only), Capeweed, Doublegee, Mustard, Wild radish, Wild turnip, Paterson's curse, Annual thistles	WA only	820mL/ha	Apply from 6 weeks after opening rains in Autumn until the end of August. Seven days after spraying stock paddock at 4-5 times normal rate, preferably with sheep. Maintain this level of grazing for 6 weeks or until pasture shows signs of over grazing. Then return to normal stocking levels. Use high stocking rates in following Spring to prevent weeds from flowering. Repeat treatments may be required for 2-3 years for complete control.
	Spear thistle, Saffron thistle		1.6L/ha	Apply to saffron thistle at the end of September when plants are running up to flower. Sub-clovers may be damaged at this rate and use is not recommended for all medic pastures.
	Melons	WA only	2.1L/ha	Heavy stocking on young plants sprayed with 750mL/ha provides effective control.
	Docks	Vic only	1.45L/ha	Apply in September only and follow other recommendations above.
	Caltrop, Capeweed, Charlock, Mustards, Paterson's curse, Shepherd's purse, Saffron, Slender, Spear or Variegated thistle, Turnip weed, Wild radish, Wild turnip	NSW, ACT, only	380mL-1.45L/ha	Spray actively growing 6-8 week old weeds. Introduce stock 7-10 days after spraying, preferably sheep (cattle are less effective). Stocking rate should be at least 5 times heavier than normal until weeds have been reduced, but before survival of desirable pasture species is threatened. Lucerne and medics may be damaged and should be grazed short before spraying. Other legumes may be affected.
Lawns	Refer Weed Table	WA & Qld only	2.1-4.3mL/1L water	Wet foliage thoroughly.

# 4. SPOT SPRAYING

# REFER TO SECTION "SPRAY APPLICATIONS AND DRIFT RISK ASSESSMENT" BEFORE APPLICATION

SITUATION & CROP	WEEDS	STATE	RATE	CRITICAL COMMENTS
High Volume Spraying	Refer to Weed Table	All States		Add 1/10th of rate on weed table to 150L of water. Each 150L of mix will cover 1000m <sup>2</sup> (1/10th ha).eg. If rate in weed table is 1.5L use 150mL/150L water.
Knapsack Application				Add 1/100th of rate on weed table to 10L of water. Each 10L of mix will cover 100m <sup>2</sup> (1/100th ha).eg. If rate in weed table is 1.5L use 15mL/10L water.

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

WITHHOLDING PERIODS

PASTURE, CEREAL CROPS DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION.

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

IN TASMANIA, THIS PRODUCT MAY ONLY BE USED FROM 15 APRIL TO 15 SEPTEMBER UNLESS OTHERWISE PERMITTED BY THE REGISTRAR OF PESTICIDES.

# **WEED TABLE**

The rates listed in the Weed Table below are spot spraying rates for use in crop or pasture, or for use where weeds only are present and no crop or pasture is involved.

**NOTE:** Where weeds are to be sprayed in a CROP or PASTURE (other than spot spraying) use only the rates given for the particular crop or situation indicated under the Directions for Use.

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#### WEED TARLE

WEEDS					TE PER HEC	TARE	PASTURES	CRITICAL COMMENTS
			CR	]				
	Vic	NSW, ACT	SA	Qld	Tas	WA	NSW, ACT, SA, Qld, Tas only	
Amaranthus spp.	-	695mL- 1.45L	-	1.1L	-	-	-	Spray young plants.
Apple of Peru	-	695mL- 1.45L	-	1.1L	-	-	-	Spray young plants. Susceptible when young.
Bathurst burr	-	1-1.45L	-	1.1L	-	-	1-1.45L NOT SA	Spray seedlings only.
Blackberry nightshade	-	695mL- 1.45L	-	1.1L	-	-	-	, ., .,
California burr		1-1.45L	-	1.1L	-	-	1-1.45L NOT SA	Spray seedlings only.
Cape tulip	-	- 1-1.43L	-	-	-	885mL- 1.65L	- 1-1.43L NOT 3A	Low rate for cormils only.
Canawaad	1.8L	-	2.2L	-	1.8L	1.00L	2.15-3.7L	Caray acadings to recette stage
Capeweed Caltrop	1.0L	1-2.2L	Z.ZL	1.1L	1.0L	-	2.10-3.7L	Spray seedlings to rosette stage.  Moderately susceptible.
Charlock	695mL-	695mL-	695mL	- I.IL	1.8L	-	1-1.45L	Spray at rosette stage.
	1L	1.45L						
Clover	-	1.6L	- 4.451	-	-	-	-	1
Common ice plant	-	-	1.45L	-	- 4.01	- 4.451	-	
Docks	1.8L	-	1.8L	1.8L	1.8L	1.45L	4.2L SA ONLY	Spray at multiple leaf stage – effective only on seedlings.
Fat hen	-	760mL-2.2L	-	1.1L	1.8L	-	-	Spray preflowering.
Fumitory - red	-	-	2.2L	-	-	-	-	
Fumitory - white	1L	-	695mL	-	-	-	-	Spray at multiple leaf stage.
Hexham scent/Melilotus	1.8L	-	1.45L	1.8L	-	-	1.45-2.15L	Spray at multiple leaf stage, before seeding.
Hoary cress	1.1-1.8L	1.45-2.15L	1.8L	1.8L	-	-	1.9-2.15L	Spray rosettes and preflowering.
Hogweed/Wireweed	1.8L	-	-	1.8L	-	-	-	Spray at multiple leaf stage (Vic) Spray at seedling and young plant stage (Qld).
Horehound	-	-	1.8L	-	-	-	2.9-4.2L SA ONLY	Spray seedlings.
Khaki weed	-	-	-	-	-	-	1.45-2.8L NOT SA	Spray seedlings only.
Lincoln weed	-	-	2.15L	-	-	-	-	Spray early rosettes.
London rocket	-	_	-	-	-	1L	-	opiay carry received.
Lupins	-	1-2.15L	_	-	-	-	_	
Mexican poppy	-	-	-	1.8L	-	-	-	Spray seedlings - plants become more resistant with age.
Mintweed	-	1.45L	-	1.1L	-	-	-	Spray seedlings - resistant in later
Mustards	295-	695mL-	695mL-	1.1L	-	1L	695mL-1.45L	stages. Spray at 2-4 leaf up to rosette
New Zealand	695mL -	1.45L 1.45-2.15L	1.8L -	-	-	-	-	stage.
spinach								
Noogoora burr	-	1-1.45L	-	1.1L	-	-	1-1.45L NOT SA	Spray seedlings only.
Paterson's curse	-	1.45-2.15L	-	1.8L	-	1.65L	2.15-2.9L	Spray rosettes or before plants have 10 leaves. Later stages harder to kill.
Potato weed	-	695mL- 1.45L	-	1.1L	-	-	-	
Rapeseed	-	1-2.15L	-	-	-	-	-	
Rough poppy	-	1.45L	-	-	-	-	-	
Safflower	-	695mL-1.8L	-	-	-	-	-	
Shepherd's purse	-	1.45-2.15L	-	-	1.8L	-	1-1.45L	Spray young rosettes.
Skeleton weed	1.8L	1.45-2.15L	1.8L	-	-	-	1.9-2.9L	Spray rosettes before aerial growth commences.
Sorrel	1.8L	2.15L	1.8L	-	-	-	-	Only moderately susceptible.
Speedwell-Ivy leaf	-	-	1.45L	-	-	-	-	
Spiny emex	-	-	-	1.8L	-	-	-	Only young plants are susceptible.
Stinkwort	-	1-1.8L	-	-	-	-	-	
Storkbill/Erodium	-	-	-	-	1.8L	-	2.1-4.2L	Spray seedlings to young rosettes.
Sunflower (seedlings)	1.8L	695mL-1.8L	-	1.1L	-	-	-	
Thistle - Californian	-	-	-	-	760mL	-	4.2-4.9L	Repeated applications may be necessary (NSW, ACT, Tas only).

WEEDS			APPLIC	ATION RAT	E PER HE	CTARE		CRITICAL COMMENTS
			CR	OP	PASTURES			
	Vic	NSW, ACT	SA	Qld	Tas	WA	NSW, ACT, SA, Qld, Tas only	
- Saffron	1.45L	695mL-1.8L	1.8L	1.8L	1.3L	1.45L	1.45-2.15L	Low rate only sufficient to control weeds in crops at rosette stage when sprayed early.
- Slender/Shore	-	1-1.8L	-	-	1.8L	-	1.45L	Suppression only.
- Soldier	1.8L	-	-	-	-	-	1.45-2.1L NOT NSW, Tas	Spray young rosettes.
- Spear	695mL	-	-	-	1.8L	-	1.45-2.1L	Spray young rosettes.
- Star	-	-	-	-	-	-	2.1-4.2L SA ONLY	Use higher rate as flower stalk appears.
- Variegated	-	695mL-2.2L	-	1.1L	1.8L	-	1.45-2.15L	Spray at rosette stage.
Thornapple	-	1-1.45L	-	-	-	-	2.1-3.2L NOT SA	Spray seedlings only.
Turnip weed/Rapistrum	-	695mL- 1.45L	-	695mL	-	1L	695mL-1.45L	
Ward's weed	-	-	1.45L	-	-	-	-	
Wild cabbage	1.8L	-	-	-	-	-	-	Spray multiple leaves.
Wild poppy	695mL	-	-	-	-	-	1.45-2.15L	Spray rosettes.
Wild radish	1.8L	2.2L	1.8L	1.1L	1.8L	1L	1-1.45L	Spray up to young rosette stage.
Wild turnip	295- 695mL	695mL- 1.45L	415mL	-	1.8L	885mL	695mL-1.45L	Spray 2-4 leaf up to rosette stage.
Vetches/Tares	1.8L	-	1.45L	-	-	-	-	Spray at multiple leaf stage.

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#### PLANT BACK DAYS FOR NUFARM SURPASS 475

CROP		RATES	·
	Up to 695mL/ha	695mL/ha-1.45L/ha	1.45-2.15L/ha
Balansa clover	7	7	10
Barley %	1	1	3
Chickpeas #	7	14	21
Cotton	10	14	21
Faba beans	7	7	10
Field peas	7	14	14
Lentils	7	7	10
Linseed	7	7	14
Lucerne	7	7	10
Lupins +	7	14	21
Medic	7	7	10
Narbon beans	7	7	10
Navy beans	10	10	14
Oats	3	3	7
Perennial ryegrass	7	7	10
Persian clover	7	7	10
Phalaris	7	7	10
Canola/Rapeseed #	14	21	28
Rice	7	7	14
Safflower #	7	14	21
Sorghum @	3	7	10
Soybean	14	14	21
Sub-Clover	7	7	10
Sunflower @	7	10	14
Triticale %	1	3	7
Vetch	7	7	10
Wheat %	1	3	7
White clover	7	7	10

IMPORTANT: WHEN APPLIED TO DRY SOILS AT LEAST 15mm (1/2inch) OF RAIN MUST FALL PRIOR TO THE COMMENCEMENT OF THE PLANT BACK PERIOD.

#### NOTES:

% In Queensland, no rainfall is required to fall prior to commencement of Plant Back Period for wheat, barley and triticale.

# In Queensland, planting of canola/rapeseed, chickpeas and safflower must be delayed for at least 14 days following rainfall of at least 15mm.

@ In Central Queensland, when using 1L/ha or less of Nufarm Surpass 475, the plant back period for sorghum and sunflower is 1 day irrespective of rainfall.

+ In WA the Plant Back Period for lupins at all rates is 28 days.

# **GENERAL INSTRUCTIONS**

Nufarm Surpass 475 is a water soluble liquid product with non-selective herbicidal activity against broadleaf weeds. Nufarm Surpass 475 will control emerged weeds only, and provides no residual control although certain plant back periods should be observed. Nufarm Surpass 475 is absorbed by plant foliage and accumulates to toxic levels in the regions of growth and reproduction, upsetting the ability of plants to balance the synthesis and use of nutrients. Visible effects are a gradual yellowing and wilting of the plants which advances to complete browning of above ground growth and deterioration of root systems. Effects may not be apparent for 7-10 days or even up to 21 days under cold or cloudy conditions.

DO NOT treat weeds under poor growing or dormant conditions such as occur in drought, water-logging, disease, insect damage, following frost, weeds heavily covered with dust or silt. Reduced results may also occur if weeds are under stress from previous herbicide application. Rainfall occurring up to 6 hours after application may reduce effectiveness.

DO NOT spray if strong winds prevail.

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#### **CROP ESTABLISHMENT**

Nufarm Surpass 475 is recommended as a herbicide additive to glyphosate for control of emerged weeds prior to crop establishment. When Nufarm Surpass 475 is applied prior to crop establishment, certain Plant Back Periods should be observed to ensure that the herbicide has degraded sufficiently to allow safe sowing of the intended crop. This process is largely influenced by moisture, temperature and certain soil characteristics and may be delayed particularly when conditions are cold and dry. Refer to the Plant Back Period table for specific information. In seasons of heavy weed growth, or where the following conditions apply, it may be necessary to further delay sowing until a suitable seedbed can be formed. Conditions which can delay crop germination and seedling development include;

- Heavy green or decaying weed growth incorporated into the soil;
- · Soil compaction or crusting;
- · Cold and wet soils;
- · Deep seeding;
- · Prior use of residual or pre-emergent herbicides.

To minimise these effects it is suggested that:

- Weed bulk be reduced by grazing and cultivating to leave trash on the surface to dry out;
- A friable seedbed be produced by cultivation, where necessary;
- The use of pre-emergent herbicides to be avoided if they might contribute to reduced germination;
- A correct seeding depth be used.

The preferred alternative is to spray early to control any weeds in their less advanced stages and ensure the seedbed is in a suitable condition for early sowing when soil temperatures are not excessively cold.

# SPRAY APPLICATIONS AND DRIFT RISK ASSESSMENT

USE ONLY when wind speed is more than 3km/hr or less than 15km/hr, as measured at the application site. USE ONLY COARSE to VERY COARSE spray quality according to the ASAE S572 definition for standard nozzles.

Checklist:

- · Have you cleaned/decontaminated your boom sprayer?
- · Have you contacted your neighbour prior to spraying?
- Is your sprayer set-up correctly for the particular application?
- Check boom calibration- at nozzle
  - nozzle choice low drift/what spray quality coarse to very coarse droplet?
  - boom height
  - speed of intended application
- · You must check, determine and record the weather conditions immediately prior to, and immediately after the spray application is made.
- Record Temperatures
  - Relative Humidity
  - Delta T
  - Wind speed (min 3km/hr, max 15km/hr)
  - Is there a temperature inversion?
- •Night Spraying Extra care is required to ensure that inversion conditions are not present. Use smoke generator to determine wind direction and presence of inversion conditions.

# **APPLICATION**

# **BOOM EQUIPMENT**

Application of Nufarm Surpass 475 plus Roundup PowerMAX® or glyphosate mixtures in spray volumes of 25-100L/ha is recommended. When Lusta®, Glean\*, Ally\* or Associate® are included in the mixture a minimum spray volume of 30L/ha is recommended. When Simazine is included in the mixture a minimum spray volume of 100L/ha is recommended. USE ONLY COARSE to VERY COARSE spray according to the ASAE S572 definition for standard nozzles. Boom height must be set to ensure double overlap of nozzle patterns at the top of the weed canopy.

#### **AERIAL EQUIPMENT**

Application of Nufarm Surpass 475 glyphosate mixtures using either Micronair or boom equipment should occur in a minimum spray volume of 15L/ha.

USE ONLY when wind speed is more than 3km/hr or less than 15km/hr, as measured at the application site.

USE ONLY COARSE to VERY COARSE spray according to the ASAE S572 definition for standard nozzles. Swath width should be 15-17m. Application under hot conditions: High temperature and/or low relative humidity cause excessive evaporation of spray droplets which may reduce results. When temperatures reach 25°C, increase water volume to 30L/ha.

DO NOT apply by aircraft when temperature is above 35°C.

DO NOT use in intensive horticultural cropping areas. Thoroughly wash aircraft, especially landing gear after each day of spraying to remove herbicide residues.

# **EQUIPMENT MAINTENANCE**

Spray solutions of Nufarm Surpass 475 and glyphosate should be mixed, stored and applied only in stainless steel, aluminium, brass, copper, fibreglass, plastic-lined containers. DO NOT mix, store or apply spray solutions in galvanised steel or unlined steel (except stainless steel) containers or spray tanks. Nufarm Surpass 475/glyphosate spray solutions may react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture that can flash or explode if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

Thoroughly clean all equipment after use either by using hot soapy water or 1% solution of ammonia followed by several clean water rinses or use Tank & Equipment Cleaner. If using a Sulfonylurea herbicides (Lusta®, Glean\*, Ally\* or Associate®), follow decontamination procedures detailed on those product labels.

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#### **COMPATIBILITY**

Nufarm Surpass 475 is compatible in tank mixes with Roundup PowerMAX®, Nufarm Glyphosate CT, Credit® Broadhectare Herbicide plus Bonus®, Roundup® CT, Weedmaster® Duo, Kamba® 500, Lusta®, Glean\*, Ally\*, Associate®, Flowable Simazine, Simazine 900DF, Flowable Nu-trazine, Nu-trazine 900DF, Revolver®, Chlorpyrifos 500EC, Dimethoate, Le Mat\*, Imidan\* and Tribunex\*.

# **SURFACTANT ADDITION**

DO NOT add surfactant except for Conservation Tillage where the product is to be tank-mixed with a glyphosate product. In this situation always add LI 700® in accordance with label directions on the glyphosate product or add Bonus® with Credit®. Use LI 700 with Glyphosate CT if insecticides will be included in the tank mixture of if faster brownout of weeds is required.

DO NOT mix with spraying oils, or any other materials or agricultural chemicals except as directed on this label.

DO NOT use LI 700 or Bonus if sulfonylurea herbicides (Lusta®, Glean\*, Ally\*, Associate®) are included in the spray mixture.

#### **TANK MIXTURES**

The Nufarm Surpass 475 directions for use on this label are designed to be used as a tank mixture with glyphosate herbicides. However as shown in the compatibility and surfactant addition sections of this label, it is possible to extend/improve weed control to include other foliage applied and/or residual herbicides and adjuvants. A mixture of Nufarm Surpass 475 and glyphosate may be tank mixed with the following herbicides, insecticides and adjuvants where recommended in the Directions for Use tables. Read and follow all label directions, restraints and plant back periods, withholding periods and safety directions for the tank mix products.

Kamba® 500 - For improved control of Sowthistle. Observe any regional use restrictions.

Lusta® or Glean\* - Will provide control for a wide range of broadleaf weeds and grasses.

Ally\* or Associate® - For improved knockdown control of Yellow burrweed (Amsinckia), Volunteer chickpeas, Chickweed, Common sowthistle, Cut-leaf mignonette, Deadnettle, Faba beans, Mallee catchfly, Soursob, Stagger weed, Wild garlic. Ally\* or Associate® DO NOT provide residual incrop weed control.

#### **INSECTICIDES**

Chlorpyrifos 500EC, Dimethoate, Imidan\* and Le Mat\*can be introduced into the tank mix for specific control to prevent insect damage to emerging crops.

#### MIXING INSTRUCTIONS

Nufarm Surpass 475 mixes readily with water. Ensure the spray tank is free of any residue of previous spray materials.

- 1. Fill the spray tank with clean water to one half of the required amount and start agitation. DO NOT use mechanical agitators as these may cause excessive foaming when herbicides are added.
- 2. Where either Bonus or LI 700 is recommended at either 100mL or 300mL/100L, add to tank through top mesh screen.
- 3. Add recommended herbicide additive/insecticide to the spray tank and mix thoroughly.
- 4. Add Nufarm Surpass and mix thoroughly.
- 5. Top up tank to 95% of desired capacity then add the glyphosate product and the remaining water.
- 6. When Nufarm Activator surfactant is used, add near the end of the filling process to minimise foaming.
- 7. Always maintain adequate agitation during application and use the tank mix promptly.

# **RESISTANT WEEDS WARNING**

GROUP HERBICIDE

Nufarm Surpass 475 Herbicide ("Surpass 475") is a member of the Phenoxys group of herbicides. Surpass 475 has the Disruptors of plant cell growth mode of action. For weed resistance management Surpass 475 is a Group I herbicide. Some naturally occurring weed biotypes resistant to Surpass 475 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 Surpass 475 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 Surpass 475 to control resistant weeds.

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

- DO NOT use unless wind speed is more than 3km/h and less than 15km/h as measured at the application site.
- DO NOT apply with smaller than COARSE to VERY COARSE spray droplets according to the ASAE S572 definition for standard nozzles.
- Direct spray contact or even slight drift may cause severe injury or destruction of any susceptible crop or other desirable plants including trees and native vegetation.
- DO NOT use when breeze is blowing towards nearby susceptible plants.
- DO NOT apply under meteorological conditions or from spraying equipment that may cause spray to drift onto nearby susceptible plants, adjacent crops, crop lands or pastures.
- Equipment settings which produce fine droplets (150 microns or less), "still air" and hot dry days may all contribute to drift.
- This is a phenoxy herbicide that can cause severe damage to susceptible crops such as cotton, tobacco, tomatoes, flowers, vegetables, vines, fruit trees, legume crops and pastures, oil seed crops or other susceptible crops and trees (eg Kurrajongs, Belahs, Eucalypts).

## PROTECTION OF LIVESTOCK

Low hazard to bees. May be applied at any time as recommended in the Directions for Use.

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

DO NOT contaminate streams, rivers or waterways with the chemical or used container.

#### STORAGE AND DISPOSAL

(15L)

Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. Triple or preferably pressure rinse inner bladder before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean packaging to recycler or designated collection point. If not recycling, deliver empty packaging 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.

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#### (20L, 200L)

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, triple rinse, break, crush or puncture and deliver empty packaging for appropriate disposal at 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. Empty containers and product must not be burnt.

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#### 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 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.

## Refillable Containers: [500L, 1000L]

Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

#### SAFFTY DIRECTIONS

Poisonous if swallowed. Avoid contact with eyes and skin. DO NOT inhale spray mist. When preparing spray, wear PVC or rubber apron, elbow length PVC gloves and face shield. When using the prepared spray, wear face shield. If product on skin, immediately wash area with soap and 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 and contaminated clothing.

#### 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), which can be obtained from your supplier or from the Nufarm website – www.nufarm.com.au

In case of emergency: Phone 1800 033 498 Ask for shift supervisor. Toll free 24 hours.

#### CONDITIONS OF SALE

"Any provisions or rights under the Trade Practices Act 1974 or relevant state legislation which cannot be excluded by those statutes or by law are not intended to be excluded by these conditions of sale. Subject to the foregoing, all warranties, conditions, rights and remedies, expressed or implied under common law, statute or otherwise, in relation to the sale, supply, use or application of this product, are excluded. Nufarm Australia Limited and/or its affiliates ("Nufarm") shall not accept any liability whatsoever (including consequential loss), or howsoever arising (including negligence) for any damage, injury or death connected with the sale, supply, use or application of this product except for liability which cannot be excluded by statute."

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