RLP APPROVED

Product Name: RELYON DIFLU-MCPA SELECTIVE HERBICIDE

APVMA approval No.: 81811/126354

Directions for Use:

Label Name:	RELYON DIFLU-MCPA SELECTIVE HERBICIDE
Signal Headings:	CAUTION  KEEP OUT OF REACH OF CHILDREN  READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Constituent Statements:	ACTIVE CONSTITUENTS: 250 g/L MCPA present as the ethyl hexyl ester 25 g/L DIFLUFENICAN
	SOLVENTS LABEL A. 325 g/L LIQUID HYDROCARBONS 150 g/L N-METHYL-2-PYRROLIDONE
	LABEL B. 305.4 g/L LIQUID HYRDOCARBONS 150 g/L N-METHYL-2-PYRROLIDONE
Mode of Action:	GROUP F I HERBICIDE
Statement of Claims:	For the Control of Certain Broadleaf Weeds in Winter Cereals and Clover as specified in Directions for Use
Net Contents:	5 L - 1000 L
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.

This section contains file attachment.

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Other Limitations:	
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.
Trade Advice:	
General Instructions:	This section contains file attachment.
Resistance Warning:	RESISTANT WEEDS WARNING GROUP F I HERBICIDE
	RELYON DIFLU-MCPA 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 RELYON DIFLU-MCPA SELECTIVE HERBICIDE is both a Group F and a Group I herbicide. Some naturally occurring weed biotypes resistant to RELYON DIFLU-MCPA SELECTIVE HERBICIDE and other Group F and Group I herbicides may exist through normal genetic variability in any weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by RELYON DIFLU-MCPA SELECTIVE HERBICIDE or other Group F or Group I herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Nutrien Ag Solutions Limited accepts no liability for any losses that may result from the failure of RELYON DIFLU-MCPA SELECTIVE HERBICIDE to control resistant weeds.
Precautions:	
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Protections:	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 breading 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

or used containers.

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

# Storage and Disposal:

Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight.

This container can be recycled if it is clean, dry, free of visible residues and has the drumMUSTER logo visible. Triple-rinse container for disposal. Dispose of rinsate by adding it to the spray tank. Do not dispose of undiluted chemical on site. Wash outside of the container and the cap. Store cleaned container in a sheltered place with cap removed. It will then be acceptable for recycling at any drumMUSTER collection or similar container management program site. The cap should not be replaced, but may be taken separately.

If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm 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.

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 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 Instructions:

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26, New Zealand 0800 764 766.

If in eyes wash out immediately with water. If swallowed, do NOT induce vomiting.

	arnings:

# **DIRECTIONS FOR USE**

CROP	WEEDS CONTROLLED	STAGE OF WEED GROWTH	STATE	RATE /ha	CRITICAL COMMENTS
CEREALS Wheat, Barley, Oats, Triticale, Cereal Rye	Wild Radish	Up to the 2 leaf stage and not more than 60mm in diameter	WA only	250mL	CROP STAGE Cereals Up to 750mL (3 leaf to late tillering stage - Z13 to 30)
(including cereals undersown with clover)		Up to the 4 leaf stage and not more than 120mm in diameter	All States	500mL	Over 750mL (5 leaf to late tillering stage - Z15 to 30) Optimum results are achieved when sprayed at 3-5 leaf crop stage (generally 4-8 weeks post sowing).
PASTURE  Newly Sown and Established  Clover-based		Up to the 6 leaf stage and not more than 150mm in diameter		750mL	WA only: DO NOT apply to Barley or Kulin Wheat before the 5 leaf stage (Z15).
pasture, Clover for Hay and Seed Production		Up to the 8 leaf stage and not more than 180mm in diameter		1.0L	Warning: RELYON DIFLU-MCPA 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).
	Charlock, Hedge Mustard, Indian Hedge Mustard, Shepherd's Purse,	Up to the 2 leaf stage and not more than 60mm in diameter		500mL	Application is recommended prior to the eighth trifoliate leaf stage, however, applications prior to the third leaf stage may result in crop damage especially
	Turnip Weed, Wild Turnip	Up to the 4 leaf stage and not more than 120mm in diameter		750mL	under stressed conditions and in sandy soils.  DO NOT apply to Annual Medics or Lucerne.
		Up to the 6 leaf stage and not more than 150mm in diameter	-	1.0L	Warning: RELYON DIFLU-MCPA 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).
	London Rocket	Up to the 5 leaf stage and not more than 120mm in	Qld only	750mL	WEED STAGE
	Ward's Weed Capeweed	diameter	SA only All States	500mL	Apply when weeds are actively growing. In most situations the rate specified for each weed size will give
	Capeweeu	Up to the 2 leaf stage and not more than 60mm in diameter	All States	SOUTH	<ul><li>satisfactory control. Under certain conditions such as:</li><li>high crop and weed density</li><li>late season germinations</li></ul>
		Up to the 4 leaf stage and not more than 120mm in diameter		1.0L	<ul> <li>abnormal weed growth (including early flowering), high rate of product (up to the maximum rate of application specified for that weed) may be required.</li> </ul>
	Crassula	Up to the 2 leaf stage		500mL	RELYON DIFLU-MCPA SELECTIVE HERBICIDE will not effectively control:
		Up to the 4 leaf stage		750mL	<ul><li>regrowth of suppressed weeds;</li><li>transplanted weeds;</li></ul>
	Prickly Lettuce	Up to the 2 leaf stage		500mL	regrowth from rhizomes or roots;     weeds growing under stress from previous herbicide
		Up to the 4 leaf stage		750mL	applications.
		Up to the 6 leaf stage		1.0L	GRAZING Efficacy on larger weeds will be improved by grazing
	Dense-flower Fumitory	Up to the 2 leaf stage		750mL	with normal levels of stock after 7 day withholding period. Refer to 'Protection of Livestock' for grazing
	Corn Gromwell, Saffron Thistle, Toad Rush			1.0L	precautions.
	Deadnettle		NSW, Vic SA only	1.0L	APPLICATION
	Sorrel	Up to 2 leaf stage	Vic only	1.0 L	Activity of this product will be reduced if weeds are stressed. Optimum results will be obtained if good soil
	Canola (Rape)	Up to 4 leaf stage	All States	500 mL	moisture exists at and after application. Where crop or weed density is high, water volume should be increased.
	Purple Goosefoot	Up to 6 leaf stage	Qld only	500 mL	mereaseu.

CROP	WEEDS CONTROLLED	STAGE OF WEED GROWTH	STATE	RATE /ha	CRITICAL COMMENTS
	Turnip Weed Wild Turnip	Cotyledon to 2 leaf	NSW only (West of Newell Hwy.) SA only (Eyre peninsula north of the line between Venus Bay and Cowell)	350 mL	WILD RADISH RELYON DIFLU-MCPA 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: • rates lower than 1.0L/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.
CEREALS Wheat, Barley, Oats, Triticale, Cereal Rye	Fumitory	2 – 6 leaf stage	All States	500 + 200mL terbutryn (500g/L)	

# SUPPRESSION OF THE FOLLOWING WEEDS

CROP	WEEDS CONTROLLED	STAGE OF WEED GROWTH	STATE	RATE /ha	CRITICAL COMMENTS
CEREALS	Saffron Thistle	Up to 6 leaf stage	All States	1.0 L	Refer to critical comments in the previous section.
Wheat, Barley, Oats, Triticale, Cereal Rye (including cereals undersown with clover)	Chickweed, Fireweed, Hexham Scent (King Island Melilot), Iceplant, Mouse-eared Chickweed, Night- scented Stock,	Up to 4 leaf stage			
PASTURE Newly Sown and Established Clover-based pasture, Clover	Paterson's Curse, Peppercress, Skeleton Weed, Long Storksbill, Volunteer Lupins.				
for Hay and Seed Production	Wireweed (hogweed)			750 mL	
	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 2 leaf stage		1.0 L	

CROP	WEEDS CONTROLLED	STAGE OF WEED GROWTH	STATE	RATE /ha	CRITICAL COMMENTS
CEREALS Wheat, barley, oats, triticale, cereal rye	Wild radish	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  Up to the 8 leaf stage and not more than 180mm in diameter*	All States	350mL plus 200mL LVE MCPA (500g/L) 500mL plus 200mL LVE MCPA (500g/L) 500mL plus 400mL LVE MCPA (500g/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 180mm in diameter.  DO NOT use this tank-mix if cereals are undersown with lucerne or annual medics.  Crop Stage  RELYON DIFLU-MCPA SELECTIVE HERBICIDE 350mL + LVE MCPA 200mL: Apply from 3 leaf to fully tillered (Zadoks Z13 to Z30).  RELYON DIFLU-MCPA SELECTIVE HERBICIDE 500mL + LVE MCPA 200mL: Apply from 3 leaf to fully tillered (Zadoks Z13 to Z30).  RELYON DIFLU-MCPA SELECTIVE HERBICIDE 500mL + LVE MCPA 200mL: Apply from 3 leaf to fully tillered (Zadoks Z13 to Z30).  RELYON DIFLU-MCPA SELECTIVE HERBICIDE 500mL + LVE MCPA 400mL: 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: RELYON DIFLU-MCPA 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 LVE MCPA product label.

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

# **WEED LIST**

Common Name	Scientific Name
Canola (Rape)	Brassica napus
Capeweed	Arctotheca calendula
Charlock	Sinapis arvensis
Chickweed	Stellaria media
Common Sowthistle (Milk Thistle)	Sonchus oleraceus
Corn Gromwell	Buglossoides arvense
Cowvine	Ipomoea lonchophylla
Crassula	Crassula spp.
Deadnettle	Lamium amplexicaule
Dense-flower Fumitory	Fumaria densiflora
Dock	Rumex spp.
Doublegee (Spiny Emex)	Emex australis
Fat Hen	Chenopodium album
Fireweed	Senecio spp.
Fumitory	Fumitory spp.
Hedge Mustard	Sisymbrium officinale
Hexham Scent (King Island Melilot)	Melilotus indicus
Horehound	Marrubium vulgare
Hyssop Loosestrife	Lythrum hyssopifolia
Iceplant	Mesembryanthemum spp.
Indian Hedge Mustard	Sisymbrium orientale
London Rocket	Sisymbrium irio
Long Storksbill	Erodium botrys
Marshmallow	Malva parviflora
Mouse-eared Chickweed	Cerastium glomeratum
Night-scented Stock	Matthiola longipetala
Paterson's Curse	Echium plantagineum
Peppercress	Lepidium spp.
Prickly Lettuce	Lactuca serriola
Purple Goosefoot	Scleroblitum atriplicinum
Rough Poppy	Papaver hybridum
Saffron Thistle	Carthamus lanatus
Scarlet Pimpernel	Anagallis arvensis
Shepherd's Purse	Capsella bursa-pastoris
Skeleton Weed	Chondrilla juncea
Sorrel	Rumex spp.
Stemless Thistle	Onopordum acaulon
Toad Rush	Juncus bufonius
Tree Hogweed	Polygonum patulum
Turnip Weed	Rapistrum rugosum
Variegated Thistle	Silybum marianum
Vetch (Tares)	Vicia sativa
Volunteer Lupins	Lupinus spp.
Ward's Weed	Carrichtera annua
Wild Radish	Raphanus raphanistrum
Wild Turnip	Brassica tournefortii
Wireweed (Hogweed)	Polygonum aviculare
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#### **GENERAL INSTRUCTIONS**

#### **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 RELYON DIFLU-MCPA SELECTIVE HERBICIDE has not been tested. Test a small area of crop before using RELYON DIFLU-MCPA SELECTIVE HERBICIDE over large areas. Consult your local Nutrien Ag Solutions representative for advice on specific varieties.

#### **Pasture**

The tolerance of clover varieties to RELYON DIFLU-MCPA SELECTIVE HERBICIDE can vary with rate of application, soil type, crop health, stage of growth and degree of moisture and temperature stress.

#### Warning

RELYON DIFLU-MCPA 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 application is recommended prior to the 8<sup>th</sup> trifoliate 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 RELYON DIFLUMCPA SELECTIVE HERBICIDE applied at 500mL/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 RELYON DIFLU-MCPA SELECTIVE HERBICIDE on clover seed yield have been tested on the following varieties. Under normal growing conditions they show levels of tolerance to RELYON DIFLU-MCPA SELECTIVE HERBICIDE applied at 500mL/ha

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

## Warning

Rose and Strawberry clover have shown increased sensitivity to RELYON DIFLU-MCPA SELECTIVE HERBICIDE. RELYON DIFLU-MCPA SELECTIVE HERBICIDE may affect the seed of yield of subterranean variety Woogenellup. Some pasture grasses, including Phalaris and Cocksfoot, may show some initial reduction in vegetative growth after application of RELYON DIFLU-MCPA 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 RELYON DIFLU-MCPA SELECTIVE HERBICIDE over large areas. Consult your local Nutrien Ag Solutions 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 RELYON DIFLU-MCPA SELECTIVE HERBICIDE 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 RELYON DIFLU-MCPA

SELECTIVE HERBICIDE 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 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 control will only be achieved where good coverage of leaf surface is achieved.

#### Compatibility

The following products are physically compatible with RELYON DIFLU-MCPA SELECTIVE HERBICIDE as a two-way mixture in the spray tank but should only be used for the crops specified:

Crop	RELYON DIFLU- MCPA SELECTIVE HERBICIDE	Compatible Product		
Wheat, triticale and cereal rye only	Up to 750mL/ha	Hoegrass (also barley), Puma Progress (wild oats only), Tristar Advance (1.5L rate only), Wildcat (wild oats only)		
Cereals (including undersown)	All rates	Chlorpyrifos (500g/L), dimethoate, endosulfan		
	Up to 500 mL/ha	Metsulfuron, Chlorsulfuron, LVE MCPA, Triasulfuron		
Cereals (not undersown)		Bromoxynil (200g/L), Amine 625, clopyralid, Tordon 50-D, dicamba (900g/kg) (up to 115g only), Eclipse		
Wheat, Barley, Triticale, and Cereal Rye only (not undersown)	All rates	Tralkoxydim		
Wheat only (not undersown)		Clodinafop		
Clover	Up to 750mL/ha	Targa, Fusilade		
Sub clover	Op to / Joint/IId	Simazine Liquid, Simazine Liquid + Nuquat mixture		
Sub clovel	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, Puma Progress 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 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 RELYON DIFLU-MCPA SELECTIVE HERBICIDE and Metsulfuron Herbicide.

**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: Hallmark 50EC, Dominex 100EC, Karate, Decis Forte EC, and Talstar.

# Warning

DO NOT use crop oils with RELYON DIFLU-MCPA SELECTIVE HERBICIDE or RELYON DIFLU-MCPA SELECTIVE HERBICIDE mixtures with other products in cereals. As formulations of other manufacturer's products are beyond the control of Nutrien Ag Solutions Limited, all mixtures should be tested prior to mixing commercial quantities.