

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

QA

# MCPA + DFF 275 EC

## HERBICIDE

### ACTIVE CONSTITUENTS:

250 g/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 **4|12** HERBICIDE

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

APVMA Approval No.: 90942/151610

**EC** Formulation Type  
Emulsifiable  
Concentrate

**BE PROUDLY  
AUSTRALIAN**

Quantum Agrosiences Holdings Pty Ltd | ABN 79 680 792 625  
Suite 2, Level 7, 330 Collins Street, Melbourne, Victoria 3000  
T: 1300 658 988 | [www.quantumag.au](http://www.quantumag.au)

 **QUANTUM  
AGROSCIENCES**

## DIRECTIONS FOR USE

### Restraints:

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
<b>CEREALS</b> Wheat, Barley, Oats, Triticale, Cereal Rye (including cereals undersown with clover)  <b>PASTURE</b> 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 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	
	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

RATE/ha	CRITICAL COMMENTS
250 mL	<b>CROP STAGE</b> <b>Cereals</b> Up to 750 mL (3 leaf to fully tillering stage – Z13 to 30) Over 750 mL (5 leaf to fully tillering stage – Z15 to 30) Optimum results are achieved when sprayed at 3-5 leaf crop stage (generally 4-8 weeks post sowing).
500 mL	<b>WA only:</b> DO NOT apply to Barley or Kulin Wheat before the 5 leaf stage (Z15). <b>Warning:</b> QA MCPA + DFF 275 EC Herbicide 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	<b>WA only:</b> DO NOT apply to Barley or Kulin Wheat before the 5 leaf stage (Z15). <b>Warning:</b> QA MCPA + DFF 275 EC Herbicide may cause transient crop yellowing of cereals. Some varieties of oats have not been tested. (Refer to 'Crop Tolerance' section of General Instructions).
1.0 L	<b>Clover</b> 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. DO NOT apply to Annual Medics or Lucerne.
500 mL	<b>Warning:</b> QA MCPA + DFF 275 EC 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).
750 mL	<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:
1.0 L	<ul style="list-style-type: none"> <li>High crop and weed density</li> <li>Late season germinations</li> </ul>
750 mL	<ul style="list-style-type: none"> <li>Abnormal weed growth (including early flowering), higher rate of product (up to the maximum rate of application specified for that weed) may be required.</li> </ul> QA MCPA + DFF 275 EC Herbicide will not effectively control:
500 mL	<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>

*continued next page*

CROP	WEEDS CONTROLLED	STAGE OF WEED GROWTH	STATE
<b>CEREALS</b> Wheat, Barley, Oats, Triticale, Cereal Rye (including cereals undersown with clover) <b>PASTURE</b> Newly Sown and Established Clover-based pasture, Clover for Hay and Seed Production – <i>continued</i>	Capeweed	Up to the 4 leaf stage and not more than 120 mm in diameter	All States
	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, 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)	
<b>CEREALS</b> Wheat, Barley, Oats, Triticale, Cereal Rye	Fumitory	2 – 6 leaf stage	All States

RATE/ha	CRITICAL COMMENTS
1.0 L	<b>Continued from previous page</b> <b>GRAZING</b> 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.
500 mL	<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. <b>WILD RADISH</b> QA MCPA + DFF 275 EC 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 1.0 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.
750 mL	
500 mL	
750 mL	
1.0 L	
750 mL	
1.0 L	
1.0 L	
500 mL	
500 mL	
350 mL	
500 mL + 200 mL terbutryn (500 g/L)	

SUPPRESSION OF THE FOLLOWING WEEDS			
CROP	WEEDS CONTROLLED	STAGE OF WEED GROWTH	STATE
<b>CEREALS</b> Wheat, Barley, Oats, Triticale, Cereal Rye (including cereals undersown with clover)	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, Peppergrass, Skeleton Weed, Long Storksbill, Volunteer Lupins	Up to the 4 leaf stage	
	Wireweed (hogweed)		
<b>PASTURE</b> Newly Sown and Established Clover-based pasture, Clover for Hay and Seed Production	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	
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*	

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

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 LVE MCPA (500 g/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 180 mm in diameter. DO NOT use this tank-mix if cereals are undersown with lucerne or annual medics.
500 mL plus 200 mL LVE MCPA (500 g/L)	<b>CROP STAGE</b> <b>QA MCPA + DFF 275 EC</b> Herbicide 350 mL + LVE MCPA 200 mL: Apply from 3 leaf to fully tillered (Zadoks Z13 to Z30). <b>QA MCPA + DFF 275 EC</b> Herbicide 500 mL + LVE MCPA 200 mL: Apply from 3 leaf to fully tillered (Zadoks Z13 to Z30). <b>QA MCPA + DFF 275 EC</b> 500 mL + LVE MCPA 400 mL: Apply from 5 leaf stage to fully tillered (Zadoks Z15 to Z30).
500 mL plus 400 mL LVE MCPA (500 g/L)	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> QA MCPA + DFF 275 EC 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.



**Warning** Rose and Strawberry clover have shown increased sensitivity to QA MCPA + DFF 275 EC Herbicide.

QA MCPA + DFF 275 EC Herbicide may affect the seed of yield of subterranean Clover variety Woogenellup. Some pasture grasses, including Phalaris and Cocksfoot, may show some initial reduction in vegetative growth after application of QA MCPA + DFF 275 EC 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 QA MCPA + DFF 275 EC Herbicide over large areas.

Consult your local Quantum Agrosiences Holdings 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 QA MCPA + DFF 275 EC 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 QA MCPA + DFF 275 EC 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 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.

##### Aircraft (NSW, Vic, SA only)

Apply in a minimum of 30 L 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 QA MCPA + DFF 275 EC Herbicide as a two-way mixture in the spray tank but should only be used for the crops specified:

Crop	QA MCPA + DFF 275 EC Herbicide	Compatible Product
Wheat, triticale and cereal rye only	Up to 750 mL/ha	Hoegrass (also barley), Puma Progress (wild oats only), Tristar Advance (1.5 L rate only), Wildcat (wild oats only)
Cereals (including undersown)	All rates	Chlorpyrifos (500 g/L), dimethoate, endosulfan
Cereals (not undersown)	Up to 500 mL/ha	Metsulfuron, Chlorsulfuron, LVE MCPA, Triasulfuron
	All rates	Bromoxynil (200 g/L), Amine 625, clopyralid, Tordon 50-D, dicamba (900 g/kg) (up to 115 g only), Eclipse
Wheat, Barley, Triticale and Cereal Rye only (not undersown)		Tralkoxydim
Wheat only (not undersown)		Clodinafop
Clover	Up to 750 mL/ha	Targa, Fusilade
Sub clover		Simazine Liquid, Simazine Liquid + Nuquat mixture
	Up to 1 L/ha	2,4-DB amine (500 g/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 QA MCPA + DFF 275 EC Herbicide and 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: Hallmark 50EC, Dominex 100EC, Karate, Decis Forte EC, and Talstar.

#### **Warning**

DO NOT use crop oils with QA MCPA + DFF 275 EC Herbicide or QA MCPA + DFF 275 EC Herbicide mixtures with other products in cereals. As formulations of other manufacturer's products are beyond the control of Members Linked Pty Ltd, all mixtures should be tested prior to mixing commercial quantities.

#### **RESISTANT WEEDS WARNING**

QA MCPA + DFF 275 EC Herbicide is a member of the phenoxy-carboxylates (phenoxy) and phenyl-ethers groups of herbicides. The product has the disruptors of plant cell growth (auxin mimics) and inhibition of carotenoid biosynthesis at the phytoene desaturase step (PDS inhibitors) modes of action. For weed resistance management, the product is a Group 4 & 12 herbicide. Some naturally occurring weed biotypes resistant to the product and other Group 4 & 12 herbicides may exist through normal genetic variability in any weed population. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by this product or other Group 4 & 12 herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Quantum Agrosiences Holdings Pty Ltd accepts no liability for any losses that may result from the failure of this product to control resistant weeds.



#### **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 closed, 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 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 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. If in eyes wash out immediately with water.

#### **SAFETY DATA SHEET**

For further information refer to Safety Data Sheet (SDS) which can be obtained from the supplier.

**CONDITIONS OF SALE:** Quantum Agrosciences Holdings Pty Ltd shall not be liable for any loss injury damage or death whether consequential or otherwise whatsoever or howsoever arising whether through negligence or otherwise in connection with the sale supply use or application of this product. The supply of this product is on the express condition that the purchaser does not rely on Quantum Agrosciences Holdings Pty Ltd's skill or judgement in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of Quantum Agrosciences Holdings Pty Ltd has any authority to add to or alter these conditions.

Additional information required under the Globally Harmonised System (GHS) classification of the substance/mixture: **Combustible liquid. May cause respiratory irritation. May damage fertility or the unborn child. Harmful to aquatic life with long lasting effects.** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid breathing mist, vapours or spray. Use only outdoors or in a well-ventilated area. Avoid release to the environment. **IF ON SKIN:** Wash with plenty of soap and water. **IF INHALED:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. **IF exposed or concerned:** Get medical advice/ attention: Call a POISON CENTER or doctor if you feel unwell. **If skin irritation occurs:** Get medical advice/attention. **If eye irritation persists:** Get medical advice/attention. Take off contaminated clothing and wash it before reuse. **In case of fire:** Use carbon dioxide, foam or dry agent for extinction. Store locked up.



Quantum Agrosciences Holdings Pty Ltd | ABN 79 680 792 625  
Suite 2, Level 7, 330 Collins Street, Melbourne, Victoria 3000  
T: 1300 658 988 | [www.quantumag.au](http://www.quantumag.au)

APVMA Approval No.:90942/151610