

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

eChem
e-Grex
 SELECTIVE 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 12.4 HERBICIDE

**For the Control of Certain Broadleaf Weeds in Winter Cereals
 and Clover as specified in Directions for Use.**

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

APVMA Approval No: 90077/127313

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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.

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>

WEED Common Name	Scientific Name
Mouse-eared Chickweed	<i>Cerastium glomeratum</i>
Night-scented Stock	<i>Matthiola longipetala</i>
Paterson's Curse	<i>Echium plantagineum</i>
Peppercress	<i>Lepidium</i> spp.
Prickly Lettuce	<i>Lactuca serriola</i>
Purple Goosefoot	<i>Scleroblitum atriplicinum</i>
Rough Poppy	<i>Papaver hybridum</i>
Saffron Thistle	<i>Carthamus lanatus</i>
Scarlet Pimpernel	<i>Anagallis arvensis</i>
Shepherd's Purse	<i>Capsella bursa-pastoris</i>
Skeleton Weed	<i>Chondrilla juncea</i>
Sorrel	<i>Rumex</i> spp.
Stemless Thistle	<i>Onopordum acaulon</i>
Toad Rush	<i>Juncus bufonius</i>
Tree Hogweed	<i>Polygonum patulum</i>
Turnip Weed	<i>Rapistrum rugosum</i>
Variiegated 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>

CROP	WEEDS CONTROLLED	STAGE OF WEED GROWTH	STATE	RATE/ha	CRITICAL COMMENTS
CEREALS Wheat, Barley, Oats, Triticale, Cereal Rye (including cereals undersown with clover) PASTURE Newly Sown and Established Clover-based pasture, Clover for Hay and Seed Production	Wild Radish	Up to the 2-leaf stage and not more than 60 mm in diameter	WA only	250 mL	CROP STAGE Cereals 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) 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: e-Grex may cause transient crop yellowing of cereals. Some varieties of oats have not been tested. (Refer to ' Crop Tolerance ' section of General Instructions). Application is recommended prior to the eighth trifoliate leaf stage, however, applications prior to the third leaf stage may result in crop damage especially under stressed conditions and in sandy soils. DO NOT apply to Annual Medics or Lucerne. Warning: e-Grex 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). 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: <ul style="list-style-type: none"> • high crop and weed density • late season germinations • abnormal weed growth (including early flowering), high rate of product (up to the maximum rate of application specified for that weed) may be required. e-Grex will not effectively control: <ul style="list-style-type: none"> • regrowth of suppressed weeds; • transplanted weeds; • regrowth from rhizomes or roots; • weeds growing under stress from previous herbicide applications. GRAZING 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. APPLICATION 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. WILD RADISH e-Grex will provide residual control of Wild Radish for up to 4 weeks after application. Effective residual activity of this product may be reduced where: <ul style="list-style-type: none"> • 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.
		Up to the 4-leaf stage and not more than 120 mm in diameter	All States	500 mL	
		Up to the 6-leaf stage and not more than 150 mm in diameter		750 mL	
		Up to the 8-leaf stage and not more than 180 mm in diameter		1.0 L	
	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		500 mL	
		Up to the 4-leaf stage and not more than 120 mm in diameter		750 mL	
		Up to the 6-leaf stage and not more than 150 mm in diameter		1.0 L	
	London Rocket	Up to the 5-leaf stage and not more than 120 mm in diameter	Qld only	750 mL	
	Ward's Weed		SA only		
	Capeweed	Up to the 2-leaf stage and not more than 60 mm in diameter	All States	500 mL	
		Up to the 4-leaf stage and not more than 120 mm in diameter		1.0 L	
	Crassula	Up to the 2-leaf stage		500 mL	
		Up to the 4-leaf stage		750 mL	
	Prickly Lettuce	Up to the 2-leaf stage		500 mL	
		Up to the 4-leaf stage		750 mL	
		Up to the 6-leaf stage		1.0 L	
	Dense-flower Fumitory	Up to the 2-leaf stage		750 mL	
	Corn Gromwell, Saffron Thistle, Toad Rush			1.0 L	
	Deadnettle		NSW, Vic, SA only	1.0 L	
	Sorrel	Up to 2 leaf stage	Vic only	1.0 L	
Canola (Rape)	Up to 4 leaf stage	All States	500 mL		
Purple Goosefoot	Up to 6 leaf stage	Qld only	500 mL		
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		
CEREALS Wheat, Oats, Triticale, Cereal Rye	Fumitory	2 – 6 leaf stage	All States	500 + 200 mL terbutryn (500 g/L)	

SUPPRESSION OF THE FOLLOWING WEEDS

CROP	WEEDS CONTROLLED	STAGE OF WEED GROWTH	STATE	RATE/ha	CRITICAL COMMENTS
CEREALS Wheat, Barley, Oats, Triticale, Cereal Rye (including cereals undersown with clover) PASTURE Newly Sown and Established Clover-based pasture, Clover for Hay and Seed Production	Saffron Thistle	Up to 6-leaf stage	All States	1.0 L	Refer to critical comments in the previous section.
	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 4-leaf stage		750 mL	
	Wireweed (hogweed)			1.0 L	
	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			
CEREALS Wheat, Barley, Oats, Triticale, Cereal Rye	Wild radish	Up to the 4-leaf stage and not more than 120 mm in diameter	All States	350 mL plus 175 mL eChem MCPA LVE 570	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 e-Grex 350 mL + 175 mL eChem MCPA LVE 570: Apply from 3 leaf to fully tillered (Zadoks Z13 to Z30). e-Grex 500 mL + 175 mL eChem MCPA LVE 570: Apply from 3 leaf to fully tillered (Zadoks Z13 to Z30). e-Grex 500 mL + 350 mL eChem MCPA LVE 570: 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: e-Grex 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 the eChem MCPA LVE 570 product label.
		Up to the 6-leaf stage and not more than 150 mm in diameter		500 mL plus 175 mL eChem MCPA LVE 570	
		Up to the 8-leaf stage and not more than 180 mm in diameter*		500 mL plus 350 mL eChem MCPA LVE 570	

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

WITHHOLDING PERIODS:

Crop Harvest: NOT REQUIRED WHEN USED AS DIRECTED

All Crops: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION

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 e-Grex has not been tested. Test a small area of crop before using e-Grex over large areas. Consult your local eChem representative for advice on specific varieties.

Pasture

The tolerance of clover varieties to e-Grex can vary with rate of application, soil type, crop health, stage of growth and degree of moisture and temperature stress.

Warning

e-Grex 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 trifoliolate 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 e-Grex 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 e-Grex on clover seed yield have been tested on the following varieties. Under normal growing conditions they show levels of tolerance to e-Grex applied at 500 mL/ha.

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

Warning

Rose and Strawberry clover have shown increased sensitivity to e-Grex. e-Grex 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 e-Grex. Care should be exercised if sensitive clover varieties or grasses are included in the pasture sward. Varieties not listed should be tested before using e-Grex over large areas. Consult your local eChem 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 e-Grex 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 e-Grex 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.

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 e-Grex as a two-way mixture in the spray tank but should only be used for the crops specified:

CROP	E-GREX	COMPATIBLE PRODUCT
Wheat, triticale and cereal rye only	Up to 750 mL/ha	Diclofop-Methyl (also barley), Fenoxypop-P-ethyl (wild oats only)
Cereals (including undersown)	All rates	eChem Chlorpyrifos 500, Dimethoate
Cereals (not undersown)	Up to 500 mL/ha	eChem Metsulfuron-methyl, eChem Chlorsulfuron 750 WG, eChem MCPA LVE 570, eChem Triasulfuron 750 WG
	All rates	Bromoxynil (200 g/L), eChem 2,4-D 625 Amine, eChem Clopyralid, eChem Piclor M 242, eChem Dicamba 500 (up to 160 mL only), Eclipse
Wheat, Barley, Triticale, and Cereal Rye only (not undersown)		Tralkoxydim
Wheat only (not undersown)		Clodinafop
Clover	Up to 750 mL/ha	Quizalofop-P-ethyl, Fluazifop-p
Sub clover		eChem Simazine 900 WG, eChem Simazine 900 WG + eChem Paraquat 250 mixture
	Up to 1.0 L/ha	2,4-DB Amine (500g/L)

When mixing with other herbicides, crop yellowing may be enhanced. When mixing with diclofop-methyl or 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 e-Grex 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: eChem Alpha-Cyp 100, eChem Lambda 250 CS, deltamethrin, and eChem Bifentrin 100 EC.

GROUP 12 & 4 HERBICIDE

RESISTANT WEEDS WARNING

eChem e-Grex Selective Herbicide is a member of the phenoxy and nicotinanalide groups of herbicides and acts by inhibiting carotenoid biosynthesis at the phytoene desaturase step (PDS inhibitors) and disrupting plant cell growth. For weed resistance management e-Grex is both a Group 12 and a Group 4 herbicide. Some naturally occurring weed biotypes resistant to e-Grex and other Group 12 and Group 4 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 e-Grex or other Group 12 or Group 4 herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, eChem (Australia) Pty Ltd accepts no liability for any losses that may result from the failure of e-Grex to control resistant weeds.

PRECAUTION

Warning

DO NOT use crop oils with e-Grex or e-Grex mixtures with other products in cereals. As formulations of other manufacturer's products are beyond the control of eChem (Australia) Pty Ltd, all mixtures should be tested prior to mixing commercial quantities.

PROTECTION OF CROPS, NATIVE & 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 vapours 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 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.

Triple rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point.

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

Re-fillable containers:

If tamper evident seals are broken prior to initial use then the integrity of the contents cannot be assured. Empty product as required into application equipment. Do not attempt to breach the valve system or filling point, or contaminate the container with water or other products. Ensure that the equipment used in transfer of the product is disconnected, triple rinsed and drained after each use. When the container is empty, close all caps and valves and return the container to the point of purchase.

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, New Zealand 0800 764 766. If swallowed, do NOT induce vomiting. Give a glass of water. If in eyes wash out immediately with water.

SAFETY DATA SHEET

Additional information is listed in the safety data sheet (SDS). A safety data sheet for eChem e-Grex Selective Herbicide is available from the supplier.

CONDITIONS OF SALE

eChem (Australia) Pty Ltd. accepts responsibility for the consistent quality of the product however since the use and application of the product is beyond control, the company accepts no responsibility whatsoever for any loss, damage or other result following the use of the product whether used in accordance with directions or not other than those mandatorily imposed by statutes, the liability is limited to the replacement of the goods and is conditional upon a claim made in writing and, where necessary, a sufficient part of the goods being returned for proper examination by the company within thirty days of sale.

For specialist advice in an emergency dial 1800 638 556 / 24 hours Australia wide.

