

**DANGEROUS POISON**  
**KEEP OUT OF REACH OF CHILDREN**  
**CAN KILL IF SWALLOWED**  
**DO NOT PUT IN DRINK BOTTLES**  
**KEEP LOCKED UP**  
**READ SAFETY DIRECTIONS BEFORE OPENING OR USING**



**GROUP LQ HERBICIDE**

For the control of a wide range of Grasses and Broadleaf Weeds as per Directions for Use

IMPORTANT: READ THE ATTACHED LEAFLET BEFORE USE  
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**DIRECTIONS FOR USE**

**Restrains:**

**DO NOT** add wetter unless spraying at high volume. Where KELPIE® P-QUAT ADVANCE HERBICIDE is mixed with water at less than 400 mL/100 L of water, add 60 mL of 1000 g/L non-ionic surfactant per 100 L of spray.

**DO NOT** spray plants which are waterlogged, under stress of any kind or covered with soil or dust.

**DO NOT** spray plants covered with heavy dew, but rain following spraying will not affect results.

**DO NOT** sow or cultivate for 1 hour after spraying but operations should commence within 7 days.

**For ground application only – DO NOT** use through aircraft, misting machines (except in banana plantations) or hand-held ultra low volume controlled droplet applications (CDA units).

**DO NOT** apply with high pressure handwand for control of Annual Weeds.

CROP USE OR SITUATION	WEEDS CONTROLLED	STATE	RATE/HA	CRITICAL COMMENTS
Aid to Cultivation to minimise cultivation and prepare a clean bed for sowing	Annual Grass and Broadleaf Weed control. Early Autumn sowing	Qld, NSW, VIC, SA, TAS, NT, ACT only	0.9 - 1.2 L#	Where cultivation follows spraying, it may commence one hour after spraying but should be completed within 7 days. Where heavy weed growth is present at spraying a better seedbed will result if cultivation is delayed 3-5 days.
	Winter, Spring and early Summer sowing		1.2 - 1.8 L	
	Wild Oats at 2 - 5 leaf stage in Autumn / Winter	Qld, VIC, SA, TAS, NT only	450 mL - 600 mL	Use the higher rates for dense, more mature weed stands. Wild Oats must have at least two leaves. If Diquat 200 g/L is used the lower KELPIE® P-QUAT ADVANCE HERBICIDE rate should be sufficient to control dense mature weeds.
	NSW, ACT only	450 mL	<b>Pasture:</b> Remains of old pasture should be reduced by continuous heavy grazing. Remove stock 3-5 days before spraying to allow to freshen up.	

CROP USE OR SITUATION	WEEDS CONTROLLED	STATE	RATE/HA	CRITICAL COMMENTS
<b>Fallows</b>	Flaxleaf Fleabane	All States	2 - 2.4 L	Imtrade Wetter 1000, Imtrade Pro 700 Surfactant or Imtrade Pronto Spray Adjuvant may be added at a rate of 0.2% w/v if climatic conditions require. Using water rates of 80 L/ha or greater is recommended.
<b>Wild Oat</b> , control in Spring Fallows	Wild Oats at 2-5 stage	Qld, NSW, NT, ACT only	0.9 - 1.5 L	Use higher rate for summer growth. Avoid spraying under hot, dry conditions. Best results will be obtained when spraying is carried out in the late evening.
<b>Selective Weed Control Autumn / early Winter</b> - Annual and Perennial Clover	Annual Grass and some Broadleaf Weed control except Paterson's Curse, Sorrel, Dock, Shepherd's Purse and some Thistles  Control of some Broadleaf Weeds including Paterson's Curse, Sorrel, Dock, Shepherd's Purse and some Thistles will not be achieved. Alternative methods such as the spray-graze technique with 2,4-D or MCPA should be considered.	All States	# 450 mL to 900 mL 0.9 to 1.2 L	Use the higher rates for dense weed stands. Use the higher rate in Winter/early Spring when Barley Grass is present. <b>All applications:</b> Graze pastures continuously after the seasonal break to a height of 2 - 4 cm. Remove stock 2 – 3 days before spraying to allow weeds to freshen up. <b>DO NOT</b> apply until Clover has reached the 6 leaf stage. <b>DO NOT</b> spray Clovers which are affected by insect attack, disease or moisture stress. <b>DO NOT</b> use on Clover Pastures growing in water repellent sands or other situations subject to moisture stress at or immediately following treatment. Poor recovery of the clover will result. <b>DO NOT APPLY TO MEDICS</b>
<b>Spray Topping to reduce Seed Set</b>	Grasses generally (particularly Annual Ryegrass)	All States	300 mL	Heavily graze paddocks during Spring flush to encourage even head development. Remove stock 2-3 weeks before the anticipated maturity date of the target species. However, if this is not feasible through lack of stock it is preferable to allow the pasture to mature ungrazed.  Delay spraying until the last seed-heads at the bottom of the plant have emerged and initial signs of haying off appear. Spray with a calibrated boom spray raised to give double overlap at the level of the seed heads.
<b>Pastures</b>	Barley Grass			Manage paddocks as above. Spray after head emergence but when all seed heads are green and there is no sign of haying off. Inspect paddocks before returning stock. Provided spraying was carried out before hardening seeds are present, harrow to knock seeds from the heads. <b>DO NOT</b> introduce lambs into paddock until safe from the risk of seed injury. If seasonal conditions favour regeneration, stock should be returned to selectively graze new shoots. Spray with a calibrated boom raised to give double overlap at the level of the seed heads.
	Saffron Thistle	NSW, SA, ACT only		Spray after the plant begins to run to head until flowering.
<b>Prevention of Annual Ryegrass Toxicity</b>	Spray Top - Graze to destroy seed heads	WA only	300 mL	Grazing management as for spray topping above. Remove stock 3-4 weeks before anticipated maturity date. Spray must be applied within 10 days after emergence of the first Ryegrass Seed Heads.  To ensure adequate control of toxin development, <b>heavy continuous grazing is essential from 1 day after spraying</b> until the pasture has completely hayed off.  The required stocking rate will vary but must be sufficient to keep all re-growth after spraying completely eaten off to prevent further growth producing new seed heads which could become toxic.
<b>Hay Freezing</b>	Maximum retention of protein in standing dry feed	All States	600 mL	Graze paddocks as for spray topping above. Remove 3-4 weeks before the anticipated maturity date. Apply prior to commencement of haying off regardless of the grass species involved. Spray with a calibrated boom spray raised to give double overlap at the level of the seed heads.

CROP USE OR SITUATION	WEEDS CONTROLLED	STATE	RATE/HA	CRITICAL COMMENTS
Orchards and Vineyards	Annual Weed Control	Qld, Vic, SA, WA, Tas, NT only	# + 1.2 - 2.4 L per sprayed ha	Spray as necessary for control of Annual Weeds. Avoid Contacting crop foliage. KELPIE® P-QUAT ADVANCE HERBICIDE will not harm trees or vines with mature brown bark if this alone is sprayed. Use the higher rate for dense weed growth.
		NSW only	# + 1.3 L/sprayed ha	If Fat Hen ( <i>Chemopodium album</i> ) or <i>Portulaca</i> spp. are present and KELPIE® P-QUAT ADVANCE HERBICIDE rate is less than the ratio 800 mL/100 L, add 120 mL Imtrade Penetrate Wetter per 100 L of spray mix.
	Flaxleaf Fleabane	All States	2 - 2.4 L	<b>Flaxleaf Fleabane:</b> Imtrade Wetter 100, Imtrade Pro 700 Surfactant or Imtrade Pronto Spray Adjuvant may be added at a rate of 0.2% v/v if climatic conditions require. Using water rates of 80 L/ha or greater is recommended. Avoid contact to crop foliage.
Potatoes	Pre-harvest weed control	All States	# 2.1 L	Spray 4-5 weeks before digging and after tops have died down.
Non-Agricultural Situations, around Sheds, Roadways, Paths	Annual Weed Control	All States	# + 1.2 to 3 L/ha or 150 mL/100 L	Spray to thoroughly wet weed growth. KELPIE® P-QUAT ADVANCE HERBICIDE can be combined with soil residual herbicides, i.e. Simazine 900 DG Herbicide, to give rapid knockdown and prolonged weed control. Use the higher rate for dense weed growth.
	Columbus Grass	NSW only	+ <b>Spot Spraying</b> 120 mL/100 L plus 1 L Smack Water Soluble Herbicide  <b>Boom Spray</b> 1.7 to 3.4 L/ha plus 12 to 22 L Smack Water Soluble Herbicide	
	Flaxleaf Fleabane	All States	2 - 2.4 L/ha	
Firebreaks	Knock down weed growth to eliminate fire hazard or assist firebreak burn	All States	1.2 to 3 L	Apply mid-Winter to early Summer.  Use the higher rate for dense weed growth. After desiccation is complete, the sprayed area may be burnt (normally 7-10 days after spraying).  KELPIE® P-QUAT ADVANCE HERBICIDE can be combined with soil residual herbicides, i.e. Simazine 900 DF or Atrazine 900 DF or Fowable Atrazine Herbicides, to give rapid knockdown and prolonged weed control.

(a) Capeweed or *Erodium spp.* present: Add Diquat 200 g/L at 750 mL to 1.5 L/ha (125 mL to 250 mL/100 L for high volume spraying). Use higher rate for plants more than 10 cm diameter.

(b) If KELPIE® P-QUAT ADVANCE HERBICIDE rate is less than the ratio 400 mL/100 L add 60 mL of Imtrade Penetrate Wetter per 100 L of spray mix.

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

FOR USE ONLY AS AN AGRICULTURAL HERBICIDE, THIS PRODUCT IS TOO HAZARDOUS TO BE USED IN THE HOME GARDEN.

#### WITHHOLDING PERIOD

DO NOT GRAZE OR CUT SPRAYED VEGETATION FOR STOCK FOOD FOR AT LEAST 1 DAY, OR GRAZE HORSES FOR 7 DAYS AFTER APPLICATION. REMOVE STOCK FROM TREATED AREAS 3 DAYS BEFORE SLAUGHTER.

## GENERAL INSTRUCTIONS

### FOR USE ONLY AS AN AGRICULTURAL AND HORTICULTURAL HERBICIDE, THIS PRODUCT IS TOO HAZARDOUS TO BE USED IN THE HOME GARDEN

This product kills Annual Grasses and most Annual Broadleaf Weeds in specified situations and should not be used for any other purpose. Quickly kills green plant tissue on contact. It is immediately inactivated in the soil or heavy dew. The principle of selective weed control with this product is that Annual Weeds are killed but perennial plants and Clovers recover after an initial scorch. The control of Annual Weeds by spraying with this product will allow the desirable perennial species to thicken up at the expense of the weeds. Moisture and fertility should not be limiting at spraying and the proportion of desirable species must be great enough for them to fill in the areas previously occupied by weeds. Long-term weed control can be obtained following the quick knockdown given by this product if it is combined with soil and residual chemicals.

### READ ALL SAFETY DIRECTIONS before commencing work.

**DO NOT** use hand-held ultra low volume controlled droplet applicators (CDA units), boomless jets or misting machines.

### MIXING

Add the required quantity of product to water in the spray tank and agitate to give even mixing. Agitate again if left standing.

### Wetting Agent

This product contains a wetting agent and additional wetter is not required unless high volume spraying results in excessive dilution of wetter content. This will occur when product rates fall below 400 mL per 100 L of spray. Under such circumstances wetter should be added at the rate of 60 mL of 1000 g/L non-ionic surfactant per 100 L of spray mix.

Where Fat Hen or Portulaca are present in Orchard or Vineyard situations, extra wetter should be used when this product ratio is less than 800 mL per 100 L. Add wetter at double the above recommendations. **DO NOT** use alkaline or anionic wetting agents.

### Clean Water

Mix this product with **clean water** only. Water should be clean and free from clay, silt and algae. Providing it meets this requirement, saline water, water collected from roofs, bore water, dam water and water from creeks may be used.

## APPLICATION

### (i) Cereals and Broadacre Spraying

Use only through a properly calibrated boom spray which should be fitted with flat fan jets and adjusted to a height to give at least double overlap of the spray at the top of the weeds being sprayed. Spraying pressures should be in the range of 200 - 300 kPa. Speed of travel should be in the range of 6 - 15 km/hr. It is essential that a good marking system be used. If a disc marker is used, it must be mounted so as to turn the soil back on to the area sprayed. It is essential to obtain good leaf coverage with the spray and volumes of dilute spray must be adjusted according to density of weed growth. 100 L/ha may be used for seedlings or well grazed weeds up to 2 cm high. For plant height 2 - 5 cm use 150 L/ha and up to 6 - 10 cm use 200 L/ha. Spray volumes may be as low as 50 L/ha (30 L/ha in WA) for weed growth below 5 cm high, or for spray topping and hay freezing. Equipment must be appropriate to this volume, properly calibrated and fitted with spraying tips designed to give medium spray droplet size category according to nozzle manufacturer specifications that refer to the ASAE S572 Standard or the BCPC Guideline.

### READ ALL SAFETY DIRECTIONS before commencing work.

### (ii) High Volume Application

Higher volumes will generally be required to give good coverage of weed growth in situations other than those specified under cereals and other broadacre crops.

### READ ALL SAFETY DIRECTIONS before commencing work.

(iii) Wash spray equipment with clean water immediately after use. This product is highly corrosive to metals, particularly galvanised iron and aluminium and should not be left for long periods in tanks or equipment made of these materials.

### READ ALL SAFETY DIRECTIONS before commencing work.

### Spraying Conditions

Avoid spraying plants under stress from waterlogging, frost, and drought etc. or covered with dust and soil. Results will be better if application is made in dull weather or at the end of the day. Light rain following spraying will not affect results. Avoid drift into neighbouring crops.

## COMPATIBILITY

KELPIE® P-QUAT ADVANCE HERBICIDE combines satisfactorily with the soil active herbicides Atrazine 900 DF and Flowable Atrazine 600, Simazine 900DF and Flowable Simazine where prolonged weed control is required as well as a quick knockdown. This product is compatible with Imtrade Penetrate Wetter, Diquat, Imtrade Spraykill 250 Herbicide, Spray Seed 250, Dicamba 500 g/L, 2,4-D Amine 625, Nufarm Surpass 475, MCPA 500 (no more than 1 L/800 mL KELPIE® P-QUAT ADVANCE HERBICIDE), Chlorsulfuron 750 g/kg, Oryzalin/Trifluralin 250 g/L, Imtrade Tri-Allate 500 EC Herbicide, Oxyfluorfen 240 g/L and Imtrade Trifluralin 480 EC Herbicide.

## RESISTANT WEEDS WARNING

GROUP	L Q	HERBICIDE
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KELPIE® P-QUAT ADVANCE HERBICIDE is a member of the bipyrindyl and triazole group of herbicides. KELPIE® P-QUAT ADVANCE HERBICIDE has the 'photosynthesis at photosystem I inhibitor' and the 'inhibitor of carotenoid biosynthesis' modes of action. For weed resistance management, KELPIE® P-QUAT ADVANCE HERBICIDE is a Group L and Group Q herbicide.

Some naturally occurring weed biotypes resistant to the KELPIE® P-QUAT ADVANCE HERBICIDE and other 'photosynthesis at photosystem I inhibitor' and 'inhibitor of carotenoid biosynthesis' 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 KELPIE® P-QUAT ADVANCE HERBICIDE or other 'photosynthesis at photosystem I inhibitor' and 'inhibitor of carotenoid biosynthesis' herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, Sinochem International Australia Pty Ltd accepts no liability for any losses that may result from the failure of KELPIE® P-QUAT ADVANCE HERBICIDE to control resistant weeds.

## RE-ENTRY PERIOD

If entry to treated areas is required before the spray has dried, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), chemical resistant gloves and impervious footwear. Contaminated clothing must be washed after each day's use.

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

**DO NOT** apply under weather conditions, or from spraying equipment, that may cause spray to drift onto nearby susceptible plants/crops, cropping lands or pastures.

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

Domestic pets and poultry - keep away from treated areas. **DO NOT repack. DO NOT** contaminate ponds, waterways or ditches with the chemical or used container. This formulation should **not** be applied on or near water which is used for human consumption, livestock watering or irrigation purposes or water used for commercial or recreational fishing.

## STORAGE AND DISPOSAL

**The method of disposal of the container depends on the container type. Read the Storage and Disposal instructions on the label that is attached to the container.**

Store in a locked room or place away from children, animals, food, feedstuffs, seed and fertilisers. Store in the closed, original container in a cool, well-ventilated area.

**DO NOT** store for prolonged periods in direct sunlight.

### Non-refillable containers other than 1000L

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.

**DO NOT** re-use empty container for any other purpose.

### Envirodrum - Micro Matic Valve (110L)

Store in 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 other 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.

### Refillable Containers (1000L only)

Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

## SAFETY DIRECTIONS

### General

**Very dangerous.** Poisonous if inhaled or swallowed. Harmful if absorbed by skin contact. Will irritate the skin. Will damage the eyes. Avoid contact with eyes and skin. **DO NOT** inhale spray mist.

### When Mixing and Using

When opening the container and preparing spray and using the prepared spray wear cotton overalls over normal clothing buttoned to the neck and wrist, elbow length chemical resistant gloves and goggles and full face-piece respirator with gas/dust cartridges. If applying by hand when opening the container and preparing spray and using the prepared spray wear cotton overalls over normal clothing buttoned to the neck and wrist and a washable hat, elbow length chemical resistant gloves and goggles and disposable mist face mask covering mouth and nose during application.

### After Use

Wash hands after use. After each days' use wash gloves, goggles and respirator and if rubber wash with detergent and warm water and contaminated clothing.

### Spray Application

**DO NOT** work in spray mist. **DO NOT** continue to use if skin irritation or nose bleed occurs. This may be caused by exposure to spray mist as the result of incorrect use of equipment or adverse climatic conditions. Stop and review handling and spraying techniques before further spraying. If symptoms persist seek medical advice.

Where there is a risk of exposure to spray mist, wear waterproof footwear and waterproof protective clothing, impervious gauntlet length gloves (rubber or PVC), goggles and a face mask and respirator covering nose and mouth and capable of filtering spray droplets. A high efficiency type particulate respirator is recommended. In any event, use a respirator which complies with the requirements of AS1716 (Standards Association of Australia). Further advice on safety equipment should be obtained from a safety equipment manufacturer. Avoid contacting vegetation wet with spray but if necessary to do so wear waterproof footwear and waterproof protective clothing and gloves.

## SAFETY DATA SHEET

For further information refer to the Safety Data Sheet (SDS), which can be obtained from your supplier or from the Sinochem Australia website at: [www.sinochem.com.au](http://www.sinochem.com.au)

**Causes damage to organs through prolonged or repeated exposure.**  
**Suspected of damaging the unborn child.**  
**Very toxic to aquatic life with long lasting effects.**  
**DO NOT** eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area.  
Remove all contaminated clothing immediately.  
**IF SWALLOWED:** Rinse mouth. Immediately call a POISON CENTER or a doctor/physician.  
**IF ON SKIN:** Wash with plenty of soap and water.  
**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice.  
**IF INHALED:** Move person to fresh air and keep comfortable for breathing.  
Call a POISON CENTER or doctor/physician if you feel unwell. Specific treatment is urgent (see First Aid Measures on Safety Data Sheet).  
Store in a well-ventilated place. Keep container tightly closed. Store locked up.  
Refer to Safety Data Sheet before use. Do not handle until all safety precautions have been read and understood.

## FIRST AID

If poisoning occurs, get to a doctor or hospital quickly. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

**NOTE TO PHYSICIANS:** For additional advice on the treatment of paraquat poisoning, please consult the booklet "The Treatment of Paraquat Poisoning: A Guide for Doctors."

**Poisons Information Centre. Phone Australia 13 11 26.**

IN A TRANSPORT EMERGENCY  
**DIAL 000**  
POLICE OR FIRE BRIGADE

FOR SPECIALIST ADVICE  
IN AN EMERGENCY DIAL  
**1800 033 111**  
24 HOURS AUSTRALIA WIDE



UN 3016 BIPYRIDILIUM PESTICIDE, LIQUID, TOXIC  
(CONTAINS PARAQUAT)  
PACKING GROUP III  
HAZCHEM CODE 2X

**APVMA APPROVAL NUMBER: 87172/119130**

## LIMITATION OF LIABILITY

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