# **DANGER**

KEEP OUT OF REACH OF CHILDREN
READ THE LABEL COMPLETELY BEFORE MIXING OR APPLYING

# KEN-ESTER LV 680

**SELECTIVE HERBICIDE** 

ACTIVE INGREDIENT: 680 g/L 2,4-D as the 2-ethyl hexyl ester in the form of an emulsifiable concentrate

GROUP 4 HERBICIDE

For broadleaf weed control in pasture (grass/ clover) and turf.



Registered pursuant to the ACVM Act 1997, No. P008710
See www.foodsafety.govt.nz for registration conditions
Approved pursuant to the HSNO Act 1996, Approval No. HSR000962
See www.epa.govt.nz for approval controls

**NET CONTENTS: 20L** 

Registrant: **Kenso Corporation (M) Sdn Bhd**Lot 29, Jalan Sungai Pinang 5/4, Taman Perindustrian Pulau Indah, 42920 Pelabuhan Klang, Selangor, Malaysia.

NZ Agent: **Kenso NZ Limited** 2 Bond Crescent, Forrest Hill, Auckland 0620 New Zealand. Ph: 0800 536 766

# KEN-ESTER LV 680 SELECTIVE HERBICIDE

#### PERSONNEL QUALIFICATION & EXPERIENCE

This product must be under the control of an appropriately trained and experienced person during storage, use and disposal. For guidance refer to the requirements for class 6 and 9 substances of the Health and Safety at Work (Hazardous Substances) Regulations 2017 part 4.5 and the Hazardous Substances (Hazardous Property Controls) Notice 2017 Part 4 Subpart C.

#### HAZARD CLASSIFICATION

Acute oral toxicity Category 4, Skin sensitisation Category 1, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1

#### DANGER

Harmful if swallowed. May cause an allergic skin reaction. Causes damage to organs through prolonged or repeated exposure.

#### **EČOTOXIC**

Very toxic to aquatic organisms with long-lasting effects. Avoid contamination of any water supply with product or empty container. Application to drains, ditches and irrigation channels must only be made when these waterways are dry and at least one month is allowed to elapse before the channels are used to carry water. Selective herbicide - very toxic to some plant species.

Beware - Spray drift hazard. Apply this product carefully. Spray drift may cause serious damage to other desirable plants. Ensure compliance with relevant regional air management plans. To minimise the risk of damage from drift of this product, especially where susceptible vegetation is within 0.5km, use low drift nozzles which minimise the production of small droplets (less than 100 microns). Maintain a water rate of at least 30 litres/ha for aerial spraying. Do not add additional wetter unless specified on the label. Preferred wind conditions for spraying are a light constant breeze away from any sensitive crop. Vapour loss of the product could possibly occur under certain environmental conditions from a sprayed area (soil or vegetation) which has a temperature above 20°C. Avoid using it near sensitive crops on sunny days when the air temperature is forecast above 20°C or on overcast days when the air temperature is forecast to be over 25°C.

## HANDLING PRECAUTION STORAGE

Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs, seeds, and fertilisers. Storage must be in accordance with NZS 8409 Management of Agrichemicals. Stores containing 100 litres of Ken-Ester LV 680 Selective Herbicide require signage and secondary containment, and more than 100 litres require emergency response. plans.

#### DISPOSAL

Triple rinse container and add rinsate to spray tank. Return empty container to an Agrecovery collection point (0800 247 326, www.agrecovery.co.nz) for disposal.

Otherwise submit empty container to any approved local authority refuse receival facility. DO NOT reuse this container for any other purpose. Avoid contamination of any water supply with chemical or empty container.

#### FIRST AID

If swallowed do NOT induce vomiting. For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If splashed in eyes, wash out immediately with water. If inhaled, move the victim to fresh air immediately. Begin artificial respiration if breathing has stopped.

#### SAFETY DATA SHEET

A Safety Data Sheet is available from the Kenso NZ website: www.kenso.co.nz

#### **CONDITIONS OF SALE**

Kenso Corporation (M) Sdn. Bhd. will not accept any responsibility whatsoever and howsoever arising and whether for consequential loss or otherwise in connection with the supply of these goods other than responsibility for the merchantable quality of the goods and such responsibilities mandatorily imposed by Statutes applicable to the sale or supply of these goods. To the extent allowed by such Statutes the liability of Kenso Corporation (M) Sdn. Bhd. is limited to the replacement of the goods or (at the option of Kenso Corporation (M) Sdn. Bhd.) the refund of the price paid and where possible sufficient part of the goods to enable proper examination being returned to Kenso Corporation (M) Sdn. Bhd. within thirty days of delivery.









EMERGENCY RESPONSE Ring 0800 CHEMCALL, or 0800 243 622 (24 hours)

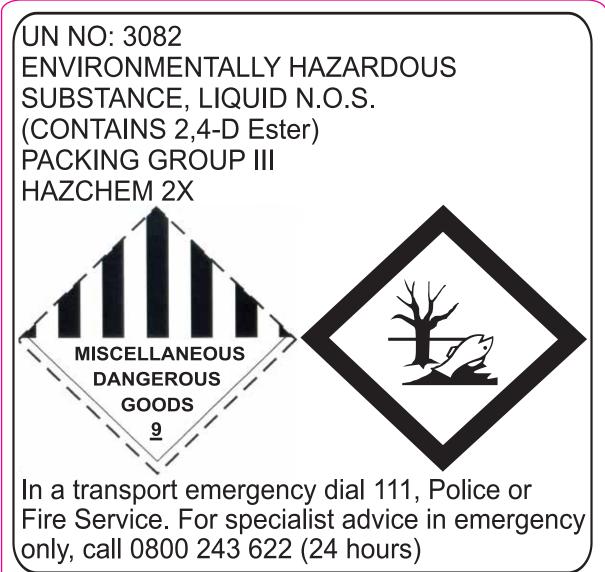
Product of Malaysia





Batch No .:

Date of Manufacture:



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2 Bond Crescent, Forrest Hill, Auckland 0620 New Zealand Phone: 0800 536 766

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UN NO: 3082
ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, LIQUID N.O.S.
(CONTAINS 2,4-D Ester)
PACKAGING GROUP III
HAZCHEM 2X
In a transport emergency dial 111,
Police or Fire Service.
For specialist advice in emergency only, call 0800 243 622 (24 hours).

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#### **ECOTOXIC**

Very toxic to aquatic organisms with long-lasting effects. Avoid contamination of any water supply with product or empty container. Application to drains, ditches and irrigation channels must only be made when these waterways are dry and at least one month is allowed to elapse before the channels are used to carry water.

Selective herbicide - very toxic to some plant species.

Beware - Spray drift hazard. Apply this product carefully. Spray drift may cause serious damage to other desirable plants. Ensure compliance with relevant regional air management plans. To minimise the risk of damage from drift of this product, especially where susceptible vegetation is within 0.5km, use low drift nozzles which minimise the production of small droplets (less than 100 microns). Maintain a water rate of at least 30 litres/ha for aerial spraying. Do not add additional wetter

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# HANDLING PRECAUTIONS STORAGE

Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs, seeds, and fertilisers. Storage must be in accordance with NZS 8409 Management of Agrichemicals.

Stores containing 100 litres of Ken-Ester LV 680 Selective Herbicide require signage and secondary containment, and more than 100 litres require emergency response plans.

#### Record Keeping:

Records, as described in NZS 8409 Management of Agrichemicals, must be kept whenever Ken-Ester LV 680 Selective Herbicide is used.

**Shelf Life:** When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture. Contact your supplier for further information about the use of any product that is older than this.

#### Mixing:

Pour the measured quantity of Ken-Ester LV 680 Selective Herbicide into the partially filled spray tank and with the agitator running top up with the remainder of the water.

#### Cleaning

Flush equipment thoroughly with clean water after use. Decontaminate before using on plants that are sensitive to 2,4-D.

#### Decontamination:

After thoroughly washing the tank and flushing the system with clean water, quarter fill the tank, add 500 g of an alkali detergent and circulate

throughout the system for 15 minutes. Drain the system. Remove the filters and nozzles and clean them separately. Then flush the system with clean water and allow to drain.

 $\begin{array}{llll} \textbf{Compatibility:} & \text{Ken-Ester LV 680 Selective Herbicide is compatible with many other agricultural chemicals including Dicamba 500 g/L and Clopyralid 300 g/L.} \end{array}$ 

#### PERSONAL PROTECTION

Avoid contact with skin or eyes and inhalation of spray mist. When handling wear eye protection, waterproof gloves, boots and overalls. Do not eat, drink or smoke while using. Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash protective clothing daily after work.

#### **EQUIPMENT**

Apply using well maintained and accurately calibrated equipment.

#### DISPOSA

Triple rinse container and add rinsate to spray tank. Return empty container to an Agrecovery collection point (0800 247 326, www.agrecovery.co.nz) for disposal. Otherwise submit empty container to any approved local authority refuse receival facility. DO NOT reuse this container for any other purpose. Avoid contamination of any water supply with chemical or empty container.

#### Spillage:

Wear appropriate protective clothing and prevent material from entering waterways. Absorb spill with inert material and place in waste containers. Wash area with water and absorb with further inert material. Dispose of waste safely in an approved landfill.

#### Transport:

Do not carry this product on a passenger service vehicle.

#### GENERAL COMMENTS:

Ken-Ester LV 680 Selective Herbicide is most effective when applied to actively growing seedling weeds. Established weeds, particularly perennial species, may not be well controlled. Do not apply to plants under stress from frost or drought.

Buttercups and thistles are generally better controlled with MCPA 750. Some weeds (e.g. Californian thistle, bindweeds) require repeat applications.

**Application Timing:** Autumn, early winter or early spring application is recommended for the best control of weeds. Cold temperatures and frosts limit plant growth and resultant weed control from applications during mid winter months may be unsatisfactory.

Pasture (grass/ clover) Management: Ken-Ester LV 680 Selective Herbicide damages plantain, chicory and clover, especially red, subterranean and suckling clover. Damage is temporary and recovery of perennial clovers usually occurs after several months.

To minimise clover damage graze pasture (grass/ clover) before spraying to remove clover leaf and expose weeds. Do not graze so hard that weed foliage is removed. Let pasture (grass/ clover) freshen for one week before spraying. Do not graze for two weeks after application to allow maximum uptake and translocation of the herbicide. Premature grazing may reduce weed control.

Light rainfall 2 hours after application should not adversely affect results.

After spraying with Ken-Ester LV 680 Selective Herbicide, poisonous plants (e.g. ragwort, hemlock) may become more palatable and stock should be kept away until the plants have died down.

**Plant Back Period:** 2,4-D has soil activity which may be exacerbated by dry soil conditions. To ensure that susceptible species (e.g. brassicas, grasses or clovers) are not damaged by 2,4-D soil residues, do not plant for 4 weeks after application.

Application: Ken-Ester LV 680 Selective Herbicide can be applied using conventional ground or aircraft spraying equipment.

Boom Spraying: Use 100 - 300 litres of water/ha. For difficult to control perennial pasture (grass/ clover) weeds use 300 - 500 litres of water/ha to improve coverage.

CDA Spraying - Pasture (grass/ clover) Weeds: Use 15 - 50 litres of water/ha. Droplet size must exceed 150 microns. Aerial Spraying: For pasture (grass/ clover) weeds apply with calibrated equipment in 30 - 60 litres of water/ha.

Spot Spraying: For pasture (grass/ clover) weeds use a pressure of 600 - 800kPa through a No. 4 tip and apply as a fine misting spray.

Complete coverage is essential. Use 500 ml/100 litres of water. For a knapsack use 5 ml/litre.

#### Weeds Controlled:

Ken-Ester LV 680 Selective Herbicide controls or severely checks the following:

Alligator weed, allseed, apple of Peru, Australian flax, Australian sedge, bachelor's button, Bathurst bur, beggar's ticks, bitter cress, black nightshade, burdock, bur medick, buttercups, Californian poppy, Canadian fleabane, Cape tulip, castor oil plant, catsear, charlock, chicory, clovers, cornbind, cresses, cudweed, dandelion, dove's foot, fathen, field bindweed, field cress, foxglove, goat's rue, greater bindweed, groundsel, hawkbit, hawksbeard, hawkweed, hedge mustard, hemp nettle, hoary cress, horehound, marsh cress, Mexican devil, mint weed, monkey musk, mouse-ear chickweed, nettles, oxtongue, parsley dropwort, penny cress, piripiri, plantains, poplars, poroporo, ragwort, red dead-nettle, redroot, rushes (leafless), selfheal, shepherd's purse, silver poplar, Spanish heath, storksbill, tansy, teasel, thistles (nodding, scotch, variegated, welted, winged), twin cress, vetch, wart cress, wild carrot, wild mustard, wild parsnip, wild radish, wild turnip, willows, willow weed, wineberry.

Weeds controlled as seedlings only: Cape weed, creeping mallow, cut-leaved geranium, daisies, docks, fennel, fumitory, inkweed, lupin, Onehunga weed, wild portulaca, spurrey, storksbill, tutu, viper's bugloss.

**Ken-Ester LV 680 Selective Herbicide does not control:** Barberry, bracken, chamomile, chickweed, cleavers, grasses, hawthorn, hydrocotyle, stinking mayweed, oxalis, prostrate amaranth, parsley piert, pearlwort, sorrel, staggerweed, stonecrop, tutsan, and many semi-woody species after the seedling stage.

### RESISTANCE MANAGEMENT GROUP 4 HERBICIDE

Naturally occurring biotypes resistant to Ken-Ester LV 680 Selective Herbicide and other phenoxy herbicides are known to exist. These become more prevalent after many years of continuous use of the product. Species with known resistant biotypes include nodding thistle, giant buttercup and slender winged thistle. To prevent or delay the development of resistant weeds use Ken-Ester LV 680 Selective Herbicide in tank mixes where appropriate, and/or in rotations with herbicides having a different mode of action against the weed.

It is an offence for users of this product to cause residues exceeding the relevant MRL in the Food Notice: Maximum Residue Levels for Agricultural Compounds.

#### **Directions For Use:**

Established pastures (grass/ clover) and waste areas: Apply 750 ml - 3 L/ha. Refer to the weeds controlled tables for guidance.

Thistles						
	Rate L/ha	Stage	Notes			
Nodding	1.5	Seedlings	Root crowns less than 2cm diameter			
thistle	2.0-2.3	Rosettes	Root crown 2-4cm diameter, before flower stalk develops			
Scotch	0.75	Seedlings				
thistle	1.5	Rosettes				
Variegated	1.5	Seedlings				
thistle	2.0-2.3	Rosettes	Less than 15cm diameter			
Winged	1.5	Seedlings				
thistle	2.0-2.3	Rosettes	Prior to flower stalk development			

To improve control of large thistles, or phenoxy resistant thistles add Clopyralid 300 g/L at 100 ml/ha. Clopyralid 300 g/L will severely suppress clover growth and clovers may take 6 - 12 months to recover.

Other Broadleaf Weeds						
	Rate L/ha	Stage	Notes			
Annual buttercups, bur medick, catsear, cresses, dandelion,	0.75	Seedlings				
hedge mustard, hemlock, plantains, redroot	1.5	Small rosettes				
Charlock, wild radish, shepherd's	1.5	Seedlings				
purse, wild turnip	2.3-	Small rosettes				
	3.0					
Apple of Peru, Bathurst bur, black nightshade, burdock, creeping mallow, docks, field bindweed, fireweed, fennel, foxglove, hoary cress, nettles, parsley dropwort, storksbill, vetch, wild portulaca, wild carrot, willow weed	2.0- 3.0	Seedlings only	Docks: regrowth from root chips is not controlled.  Vetch: spray at multiple leafstage.			
Ragwort	2.0	Seedlings	Large rosettes or multicrowns			
	3.0	Small rosettes	require spot treatment with other herbicides.			

Woody and Non-Crop/Pasture (grass/ clover) Weeds						
	Rates	Notes				
Willows	Aerial Spraying: 6L in 200-400L water/ha	Apply in late spring to fully leafed trees. A second treatment may be required 12 months later.				
	Gun Spraying: 350ml/100L water	Apply in late spring to fully leafed trees. Ensure complete coverage.				
	Stump swabbing or frilling: Use a 1:40 mixture of Ken- Ester LV 680 Selective Herbicide in diesel or waste oil.	Apply to cut or frilled surface immediately after cutting using a paint brush or knapsack.				
Spanish heath 500ml/100L water		Apply to complete coverage during active spring growth.				
Cape tulip, goat's rue seedlings, and leafless rushes	3-6L/ha in 300-500L water as an overall boom spray	Treat rushes with the high rate in spring.				
Australian sedge 530ml plus 100ml paraquat (25%) / 100L water		Spot spray in the April-November period. Ensure plants are completely wet.				