

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name	Diquat 200 Herbicide
Company Name	Kenso Corporation (M) Sdn Bhd
Address	2 Bond Crescent, Forrest Hill, Auckland 0620 New Zealand
Telephone	(09) 410 0861
Emergency Telephone	0800 CHEMCALL (0800 243 622) (24 hours)
National Poisons Centre	0800 POISON (0800 764 766) (24 hours)
Use	For use as a desiccant to control a wide range of broadleaf weeds in Barley, Green Beans, Lucerne, Peas, Red Clover, Wheat and White Clover and haulm destruction in Potatoes.

SECTION 2 – HAZARDS IDENTIFICATION

Hazard Pictograms	
Hazard Classification	6.1C, 6.3A, 6.9A, 8.1A, 9.1A, 9.3C
Priority Identifier	DANGER
Secondary Identifier	KEEP OUT OF REACH OF CHILDREN
	6.1C = May be fatal if swallowed, inhaled or absorbed through the skin.
	6.3A = May cause skin irritation
	6.9A = May cause eye damage from repeated oral exposure at high doses.
	8.1A = This product is corrosive to metal.
	9.1A = Very toxic to aquatic organisms.
	9.3C = Harmful to terrestrial vertebrates.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS No	Proportion
Diquat (present as dibromide)	85-00-7	20% w/v
Water		>60%
Other inert ingredients	secret	To 100% w/v

SECTION 4 – FIRST AID MEASURES

Ingestion	If poisoning occurs get to a doctor or hospital quickly, warning by telephone of the estimated arrival time so that treatment is not delayed. Do not induce vomiting. DO NOT delay the start of treatment.
Eye	Immediately irrigate with copious quantities of water for at least 20 minutes. Eyelids to be held open. Urgently seek medical assistance. Transport to hospital or medical centre.
Skin	Immediately take off all contaminated clothing. Wash skin immediately with water followed by soap and water. If swelling, redness, blistering or irritation occurs seek medical attention. Contaminated clothing should be disposed of or thoroughly laundered before reuse.
Inhalation	Remove victim from exposure. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Obtain immediate medical attention.
Advice to Doctor	Give up to 1 litre of 15% aqueous suspension of Fuller's Earth orally or via gastric tube, together with a suitable purgative (200mL of a 20% aqueous solution of mannitol). If ingested, wash out the stomach and test urine for the presence of Diquat. If there is severe mouth ulceration give nothing by mouth until patient's condition has improved. Give intravenous fluids only. Eye contact: severe damage may be caused by apparently trivial contact and healing may be delayed. Medical supervision should continue until complete healing has occurred.

SECTION 5 – FIRE FIGHTING MEASURES

Fire/Explosion Hazard	Non-combustible
HAZCHEM Code	2X
IER Guide No	37
Extinguishing Media	Preferred extinguishing media are carbon dioxide, dry chemical, foam, water fog.
Fire Fighting Instructions	Evacuate personnel to a safe area. Always wear positive-pressure self-contained breathing apparatus and full protective clothing. Do not allow water from fire-fighting to enter water supplies or drainage systems.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions	For appropriate personal protective equipment (PPE), refer to section 8.
Spillage	
Small Spill	For cleanup of a spill from a single shipping pack soak up with clay, sand or other non-combustible absorbent material and place into containers for disposal. If applicable, wash the area with detergent and water.
Large Spill	Prevent spillage from entering drains or water courses. Wear full chemical resistant protective clothing including coveralls, boots, goggles and gloves. Stop leak if safe to do so, and contain spill. Absorb into clay, sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recovery product into labelled containers for recycling or salvage, and dispose of promptly. After spills, wash area with a detergent based solution preventing runoff from entering drains. If a significant quantity of material enters drains, immediately advise regional council and emergency services. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.
Environmental Precautions	Diquat concentrate, solutions and washings must be prevented from entering surface water drains or waterways.

SECTION 7 – HANDLING AND STORAGE

Storage	Keep out of reach of children. Store in original container, tightly closed, away from human and animal foodstuffs, medicines and remedies, seeds and fertilisers. Segregate from incompatible substances (see section 10 below). Store in a cool, dry, well ventilated place and protect from sunlight.
Handling	Avoid contact with skin and eyes and inhalation of concentrate or spray mist. When using, do not eat, drink or smoke. Wash face and hands before eating, drinking or smoking.
Approved Handler	Required. Product must be under the control of an Approved Handler over all lifecycle stages.
Tracking (Record Keeping)	Required.
Additional Requirements	All aspects of storage, handling, use, disposal and record keeping must be in accordance with NZS 8409:2004 'Management of Agrichemicals', and relevant local and regional council plans.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls	No special requirements. Product is used outdoors. Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. If airborne mists or vapours are generated, use respiratory protection and local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit. Follow precaution statements on the label and the use and safety directions in Code of Practice for the Management of agrichemical NZS8409.
Personal Protection	Use only protective equipment bearing the mark of the Standards Association of Australia/ New Zealand. In case of heavy exposure, wear full respiratory

protection (at least to organic vapour standard) eye protection, chemical resistant coveralls, footwear and gloves.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form	Soluble liquid
Colour	Dark red brown colour
Odour	Pyridine base
pH	4 – 5.5
Specific gravity	1.20
Flash point (°C)	NA
Flammability Limits	Non combustible
Miscibility	Soluble
Oxidising properties	Not oxidising
Explosive properties	Not explosive

SECTION 10 – STABILITY AND REACTIVITY

Stability	Stable under normal conditions
Incompatibility	Strong oxidising agents. Diquat is highly corrosive to most metals, e.g., aluminium, Zinc and iron. Diquat is inactivated by absorption onto clays.
Decomposition	During a fire, smoke may contain the original material in addition to combustion products of varying composition that may be toxic and/ or irritating. Take appropriate protective measures. It may emit oxides of nitrogen and possibly toxic fumes of hydrogen chloride and hydrogen bromide.
Dangerous Reactions	Not known.

SECTION 11 – TOXICOLOGICAL INFORMATION

This section describes effects which could occur if this product is not handled in accordance with this data sheet.

Acute Toxicity (Active Ingredient)	Acute Oral LD ₅₀ (rats) : 550 mg/kg Acute Dermal LD ₅₀ (rats) : >5000 mg/kg Acute inhalation LC ₅₀ (4h): 0.64 mg/L air
Skin Irritation	Moderate irritant
Eye Irritation	Slight irritant
Sensitisation Effects	Not a sensitizer
Chronic	Diquat dibromide technical has been extensively tested on laboratory mammals and in test-tube systems. No evidence was obtained of mutagenic, carcinogenic, teratogenic or reproductive effects. Ocular effects (cataracts) have been reported following long term oral exposure of laboratory animals.

SECTION 12 – ECOTOXICITY INFORMATION

This section describes effects which could occur if this material is not handled in accordance with this data sheet.

The following information is presented in respect of the active ingredient:

Ecotoxic Effects	Very ecotoxic in the aquatic environment Harmful in the aquatic environment Very ecotoxic to terrestrial vertebrates Harmful to terrestrial invertebrates Toxic to birds The compound is low hazard to bee
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SECTION 13 – DISPOSAL CONSIDERATIONS

Product	Dispose of this product only by using according to the label, or at an approved landfill or other approved facility.
Container	Ensure the container is empty. Triple rinse empty container and add rinsate to the spray tank. Recycle empty container through Agrecovery (0800 247 326, www.agrecovery.co.nz). Otherwise crush and bury in a suitable landfill. DO NOT reuse this container for any other purpose.

SECTION 14 – TRANSPORT INFORMATION

Dangerous Goods	
UN Number	1760
Proper Shipping Name	CORROSIVE LIQUID, N.O.S. (contains diquat dibromide)
Class	8
Subsidiary Class	None
Packaging Group	III
Additional Information	MARINE POLLUTANT
MTQ (Non-Commercial)	250 L

SECTION 15 – REGULATORY INFORMATION

HSNO Approval No	HSR000446
ACVM Approval No	P8096

SECTION 16 – OTHER INFORMATION

This SDS contains only safety-related information. For other data see product literature.

Contact Points	
Police, Ambulance and Fire Service	111
National Poisons Information Centre	0800 POISON (0800 764 766)
Hazardous Substances Emergency	0800 Chemcall (0800 243 622)