


SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name	Ionix 250 EC Herbicide
Company Name	Kenso Corporation (M) Sdn Bhd
Address	2 Bond Crescent, Forrest Hill, Auckland 0620 New Zealand
Telephone	0800 536 766
Hazardous Substances	
Emergency Telephone	0800 CHEMCALL (0800 243 622) (24 hours)
National Poisons Centre	0800 POISON (0800 764 766) (24 hours)
Use	For the control of certain broadleaf weeds in onions, garlic and fine turf grass.

SECTION 2 – HAZARDS IDENTIFICATION

Hazard Pictograms	
GHS Signal Word	WARNING
Hazard Classification	Flammable liquid Category 4, Acute oral toxicity Category 4, Acute dermal toxicity Category 4, Eye irritation Category 2, Skin sensitisation Category 1, Reproductive toxicity Category 2, Specific target organ toxicity (repeated exposure) Category 2, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1
Hazard Statement	<p>H227: Combustible liquid.</p> <p>H302: Harmful if swallowed.</p> <p>H312: Harmful in contact with skin.</p> <p>H317: May cause an allergic skin reaction.</p> <p>H319: Causes serious eye irritation.</p> <p>H361: Suspected of damaging fertility or the unborn child.</p> <p>H373: May cause damage to organs through prolonged or repeated exposure.</p> <p>H400: Very toxic to aquatic life.</p> <p>H410: Very toxic to aquatic life with long lasting effects.</p>
Prevention	<p>P201: Obtain special instructions before use.</p> <p>P202: Do not handle until all safety precautions have been read and understood.</p> <p>P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P260: Do not breathe dust/fume/gas/mist/vapours/spray.</p> <p>P264: Wash contacted areas thoroughly after handling.</p> <p>P270: Do not eat, drink or smoke when using this product.</p> <p>P272: Contaminated work clothing should not be allowed out if the workplace.</p> <p>P273: Avoid release to the environment.</p> <p>P280: Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.</p>
Response	<p>P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.</p> <p>P302 + P352: IF ON SKIN: Wash with plenty of soap and water.</p> <p>P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P308 + P313: IF exposed or concerned: Get medical advice/attention.</p> <p>P321: Specific treatment (see FIRST AID on this label).</p> <p>P330: Rinse mouth.</p> <p>P333 + P313: If skin irritation or rash occurs: Get medical advice/attention.</p> <p>P337 + P313: If eye irritation persists: Get medical advice/attention.</p> <p>P362 + P364: Take off contaminated clothing and wash it before reuse.</p> <p>P370 + P378: In case of fire: Use water to extinguish.</p> <p>P391: Collect spillage.</p>
Storage	<p>P403: Store in a well-ventilated place.</p> <p>P405: Store locked up.</p>

Disposal P501: Dispose of contents/container as specified on the registered label.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS No	Proportion
loxynil (as octanoate)	3861-47-0	25% w/v
Hydrocarbon liquid	64742-94-5	62.1% w/v
Inert ingredients	secret	To 100% w/v

SECTION 4 – FIRST AID MEASURES

Ingestion	If swallowed, do not induce vomiting, seek medical advice immediately.
Eye	Flush eyes immediately with plenty of fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. However, if irritation persists, seek immediate medical advice.
Skin	Remove contaminated clothing, wash skin with plenty of soap and water. Seek immediate medical advice if any signs or symptoms described in this document occur. Wash and decontaminate contaminated PPE/clothing before re-wearing.
Inhalation	Remove to fresh air until recovered. See a doctor if discomfort or irritation continues.
Advice to Doctor	Treat symptomatically.

SECTION 5 – FIRE FIGHTING MEASURES

Fire/Explosion Hazard	Flammable.
HAZCHEM Code	3Z
IER Guide No	47
Extinguishing Media	Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Fire Fighting Instructions	During a fire, toxic fumes may be emitted. Wear self-contained breathing apparatus. Contain runoff.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions	For appropriate personal protective equipment (PPE), refer to section 8.
Spillage	Stop leak if safe to do so, and contain spill. Absorb spilt material with absorbent, non-organic materials such as sand, clays or soils. Sweep contaminated material up and shovel or collect recoverable material into labelled, sealable containers for recycling or salvage, and dispose of promptly. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise local regional council and emergency services immediately. Ensure appropriate disposal by consulting with local and/or regional authorities prior to disposal. Thoroughly launder or dispose of contaminated protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry. Do not dispose of undiluted concentrates on site.
Environmental Precautions	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 hazardous substances (Classes 1, 4 & 5). Store in a cool, dry, well ventilated place and protect from sunlight. Avoid temperatures below -5°C or above 35°C
Handling	When mixing, applying or when likely to have any exposure to concentrate, mixes or mists/vapours suitable chemical resistant clothing must be worn including; coveralls, face shield, respiratory protection (organic vapour minimum specification) gauntlet gloves and boots/footwear. When using, do not eat, drink or smoke. Wash face and hands before eating, drinking or smoking.
Handler Competence	Persons responsible for the storage, handling, mixing, applying or disposing of

Record Keeping Additional Requirements	<p>this product must either be a Certified Handler, or be trained, experienced or supervised in accordance with the requirements of the Health and Safety at Work (Hazardous Substances) Regulations 2017 part 4.5 & 4.6 and the Hazardous Substances (Hazardous Property Controls) Notice 2017 Part 4 Subpart C.</p> <p>Keep records of use.</p> <p>All aspects of storage, handling, use, disposal and record keeping must be in accordance with NZS 8409:2021 'Management of Agrichemicals', and relevant local and regional council plans.</p>
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SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Workplace Exposure Standards Engineering Controls	<p>Ioxynil octanoate</p> <p>None established.</p> <p>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 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.</p>
Personal Protection	<p>Use only protective equipment bearing the mark of the Standards Association of Australia/ New Zealand. In case of exposure, when mixing, applying or when likely to have any exposure to concentrate, mixes or mists/vapours suitable chemical resistant clothing must be worn including; coveralls, face shield, respiratory protection (organic vapour minimum specification) gauntlet gloves and boots/footwear.</p>

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form Colour Odour pH Flash point (°C) Flammability Limits Density (at 20°C) Miscibility Oxidising properties Explosive properties	<p>Liquid</p> <p>Clear brown</p> <p>Aromatic odour</p> <p>4.8</p> <p>> 93°C</p> <p>Auto-ignition temperature >400°C.</p> <p>1.074</p> <p>Miscible</p> <p>Not oxidising</p> <p>Not explosive</p>
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SECTION 10 – STABILITY AND REACTIVITY

Stability Incompatibility Decomposition Dangerous Reactions	<p>Stable under normal conditions</p> <p>None known</p> <p>Combustion or thermal decomposition will evolve toxic and irritant vapours.</p> <p>Products arising from combustion or thermal decomposition may be toxic, corrosive or flammable.</p>
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SECTION 11 – TOXICOLOGICAL INFORMATION

<p>This section describes effects which could occur if this product is not handled in accordance with this data sheet.</p>	
Ingestion Eye Skin Inhalation Acute Toxicity (Active Ingredient) Sensitisation Effects Mutagenic Effects Carcinogenic Effects	<p>Not known – no cases of human poisoning known</p> <p>Irritant</p> <p>Irritant</p> <p>Not known – no cases of human poisoning known</p> <p>Acute Oral LD₅₀ (rats): >602 mg/kg</p> <p>Acute Dermal LD₅₀ (rats): >2000 mg/kg</p> <p>Acute Inhalation LC₅₀ (rats): >3 mg/l (Technical ioxynil)</p> <p>Sensitisation from prolonged skin contact.</p> <p>None</p> <p>None</p>

Reproductive Effects	None
Teratogenic (Birth) Effects	None
Systemic Effects	None

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	<p>Acute toxicity to Birds LD₅₀ (Japanese quail) = >677 mg/kg LD₅₀ (pheasants) = >1000 mg/kg LD₅₀ (mallard ducks) = >1200 mg/kg</p> <p>Acute toxicity to Fish LC₅₀ (96 h) (rainbow trout) = 0.043 mg/L LC₅₀ (96 h) (bluebill sunfish) = 0.024 mg/L</p> <p>Growth Inhibition, Algae EC₅₀ (73 h) (Nacivula pelliculosa) = 0.24 mg/L EC₅₀ (73 h) (Scenedesmus subspicatus) = 4.6 mg/L</p> <p>Toxicity to aquatic Invertebrates EC₅₀ (48 h) (daphnia) = 0.068 mg/L</p> <p>Toxicity to soil dwelling organisms LC₅₀ (worms) = 60 mg/kg</p> <p>Toxicity to honey bees LD₅₀ (oral) > 3.27 ug/bee LD₅₀ (contact) > 200 ug/bee</p>
Environmental Fate	<p>Ioxynil octanoate does not bioaccumulate. DT₅₀ (water) = < 6 days; DT₅₀ (soil) = 10 days.</p>
Environmental Exposure Limit	None established.

SECTION 13 – DISPOSAL CONSIDERATIONS

Product	Dispose of this product only by using according to the label, or at an approved hazardous substance waste receival facility or other approved waste transfer station/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 submit to a suitable refuse transfer station or hazardous waste receival facility. DO NOT reuse this container for any other purpose.

SECTION 14 – TRANSPORT INFORMATION

Dangerous Goods	
UN Number	3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS IOXYNIL)
Class	9
Subsidiary Class	None
Packaging Group	III
Additional Information	MARINE POLLUTANT
MTQ (Non-Commercial)	250 L

SECTION 15 – REGULATORY INFORMATION

HSNO Approval No	HSR000525
ACVM Approval No	P010127

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)