

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name	Laoch 600 EW Organophosphate Insecticide
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 insect pests in cereals, forage brassicas, ornamentals, pasture, certain seed crops, apples and pears (non-bearing), avocados, mandarins, orange, tomatoes (outdoor) and strawberries.

SECTION 2 – HAZARDS IDENTIFICATION

Hazard Pictograms	
GHS Signal Word	DANGER
Hazard Classification	Acute oral toxicity Category 4, Acute dermal toxicity Category 4, Acute inhalation Category 4, Reproductive Toxicity Category 2, Specific target organ toxicity (repeated exposure), Category 1, Hazardous to soil organism, Hazardous to terrestrial vertebrates, Hazardous to terrestrial invertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1
Hazard Statement	<p>H302: Harmful if swallowed.</p> <p>H312: Harmful if contact with skin.</p> <p>H332: Harmful if inhaled.</p> <p>H361: Suspected of damaging fertility or the unborn child.</p> <p>H372: Causes 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>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>P271: Use only outdoors or in a well-ventilated area.</p> <p>P273: Avoid release to the environment.</p> <p>P280: Wear protective gloves/protective clothing/eye protection/face 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>P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.</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>P362 + P364: Take off contaminated clothing and wash it before reuse.</p> <p>P391: Collect spillage.</p>
Storage	P405: Store locked up.
Disposal	P501: Dispose of contents/container as specified on the registered label.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS No	Proportion
Diazinon	333-41-5	60% w/v
Other 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. Discard contaminated non-waterproof shoes and boots. 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	<p>Organophosphates:</p> <p>Initial Treatment: Atropine is the specific antidote. Large amounts are required in organophosphate poisoning. An initial trial dose of atropine 2 mg intravenously should be given and repeated every 15 minutes until an atropine effect is noted (dilated pupils, dry mouth, flushing of the skin). Reduce to a schedule that maintains full atropinisation for at least 24 hours. The dose and frequency of atropine will vary from case to case.</p> <p>Medical: Take blood samples for cholinesterase levels before starting treatment. Stomach washout if organophosphate has been ingested. Pralidoxime enhances the reactivation of acetyl cholinesterase. It is most effective if given early, but can still be started up to 48 hours after poisoning. Pralidoxime is given at a dose of 1-2mg by slow I.V. infusion at a maximum rate of 0.5gm/min. It is used as an adjunct to, not a replacement for atropine.</p> <p>Respiratory Difficulty - Carefully monitor for 24 hours.</p> <p>Convulsions – Control with Diazepam (Valium) 5-10mg by slow I.V. or I.M. repeat as necessary.</p>
Symptoms of Exposure which could occur if this material is not handled in accordance with instructions. Note: Symptoms may be delayed for up to 24 hours or more following exposure.	
Ingestion	Excessive sweating, salivation, headache, weakness, faintness, nausea, vomiting, diarrhoea, small pupils, blurred vision, convulsions, muscle twitching.
Eye	No data available. May cause constriction of the pupil.
Skin	No data available. Can be absorbed via the skin (see 'Ingestion' above).
Inhalation	No data available. Can be absorbed via the lungs (see 'Ingestion' above).

SECTION 5 – FIRE FIGHTING MEASURES

Fire/Explosion Hazard	Hazardous thermal decomposition products may include but not limited to: various aliphatic organophosphates, substituted pyrimidine and hydrogen cyanide. S-TEPP and diazoxon may form when diazinon is reacted with trace amounts of water. Oxides of carbon, nitrogen, sulphur and phosphorus may also be formed. Sulphur dioxide is an irritant and may induce asthma. Nitrogen oxides are irritants to the lungs - may cause pulmonary oedema. Carbon dioxide causes asphyxia by displacing oxygen.
HAZCHEM Code	3Z
IER Guide No	47
Extinguishing Media	Extinguish fire with foam, dry powder, carbon dioxide or water spray.
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	Absorb spilt material with absorbent 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 regional council and emergency services immediately. Ensure appropriate disposal by consulting local, regional authority regulations prior to disposal. Thoroughly launder or dispose of contaminated protective clothing before

Environmental Precautions	storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry. Do not dispose of undiluted concentrates on site. Concentrate, solutions and washings must be prevented from entering surface water drains or waterways.
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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.
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.
Handler Competence	Persons responsible for the storage, handling, mixing, applying or disposing of 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.
Tracking	Not required.
Record Keeping	Records of use/application must be kept.
Additional Requirements	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.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Workplace Exposure Standards	Diazinon 0.1 g/m ³ (8 hr TWA)
Engineering Controls	Ensure adequate ventilation, especially in confined areas. 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. 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) gauntlet gloves and boots/footwear.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form	Flowable liquid
Colour	Milky white colour
Odour	Negligible
Specific gravity	1.07 g/L
pH	7 – 9
Flash point (°C)	NA
Flammability Limits	Non combustible
Miscibility	Dispersible in water
Oxidising properties	Not oxidising
Explosive properties	Not explosive

SECTION 10 – STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Incompatibility	No particular incompatibilities.
Decomposition	Not applicable.
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 (for active ingredient, diazinon)	Acute Oral LD ₅₀ (rats): 300 mg/kg Acute Dermal LD ₅₀ (rats): 876 mg/kg Acute Inhalation LC ₅₀ (rats) > 1600 mg/L/4 hour
Eye Irritation	Irritant.
Skin Irritation	Irritant.
Sensitisation Effects	None
Carcinogenic Effects	None
Reproductive Effects	Suspected reproductive/ developmental toxicant.
Mutagenic Effects	No data available.

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	Diazinon is not rapidly degradable.
Persistence and degradability	Diazinon is fairly strongly absorbed onto soil. Mobility is low. T _{1/2} = 2-4 weeks in soil.
Mobility	Diazinon does not bio-accumulate.
Bioaccumulative Potential	Non phytotoxic when used as directed. Principle metabolites in animals are diethyl thiophosphate and diethyl phosphate. Degradation in soil and water oxidises to the phosphate (diazoxon) and hydrolysis.
Environmental Fate	LC ₅₀ (96 hr) for zebra danio is 0.8 -1.2 µg/l. LC ₅₀ (96 hr) for rainbow trout is 2.6 – 3.2 mg/l. LC ₅₀ (96 hr) for bluegill sunfish 16 mg/l.
Acute Toxicity – Fish (for active ingredient, diazinon)	Algae: EC ₅₀ (72 h) Freshwater green algae 213.6 mg/L
Acute Toxicity – Other Organisms (for active ingredient, diazinon)	Daphnia: EC ₅₀ (48 h) water flea 0.22 – 0.29 µg/L

SECTION 13 – DISPOSAL CONSIDERATIONS

Product	Dispose of this product only by using according to the label, or at an approved local authority hazardous waste receival facility 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 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 DIAZINON)
Class	9
Subsidiary Class	None
Packaging Group	III
Additional Information	MARINE POLLUTANT
MTQ (Non-Commercial)	1000 L

SECTION 15 – REGULATORY INFORMATION

HSNO Approval No	HSR000180
ACVM Approval No	P010022

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)