

SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name: Kensban 500 Insecticide
Company Name: Kenso Corporation (M) Sdn Bhd
Address: 49B, Apollo Drive, Rosedale, Auckland 063 NZ
Telephone Number: (09) 410 0861
Emergency Telephone Number: (24 Hours) 0800 243 622
Use: For use as broad spectrum insecticide to control of insect pests in agricultural and horticultural crops.

SECTION 2 – HAZARDS IDENTIFICATION

Hazard classification: 3.1D, 6.1C, 6.3B, 6.4A, 6.9A, 9.1A, 9.2B, 9.3A, 9.4A
Priority Identifier: WARNING – COMBUSTIBLE LIQUID
TOXIC
ECOTOXIC
KEEP OUT OF REACH OF CHILDREN
Secondary Identifiers: 3.1D = Combustible liquid – keep away from naked flame.
6.1C = May be fatal if swallowed, inhaled or absorbed through the skin.
6.3B = Harmful – may cause skin irritation.
6.4A = Harmful – may cause eye irritation.
6.9A = Toxic – presumed to/may cause target organ damage from repeated oral exposure at high doses.
9.1A = Very toxic to aquatic organisms
9.2B = Toxic in the soil environment
9.3A = Very toxic to terrestrial vertebrates
9.4A = Very toxic to terrestrial invertebrate

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
Chlorpyrifos	2921-88-2	50%w/v
Other ingredients	secret	<10%w/v
Aromatic hydrocarbon	secret	To 100% w/w

SECTION 4 – FIRST AID MEASURES

Swallowed:	Never give anything by mouth to an unconscious person. If swallowed DO NOT induce vomiting. For advice, contact the National Poisons Centre on 0800 POISON (0800 764 766). Seek medical assistance immediately.
Skin:	Remove contaminated clothing and wash affected area thoroughly with soap and water. If a large area is affected seek medical assistance.
Eyes:	Flush with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical attention if irritation persists.
Inhaled:	Remove patient to fresh air. Lay down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.

Advice to Doctor: Atropine is the specific antidote.

SECTION 5 – FIRE FIGHTING MEASURES

Fire and Explosion Hazards:	This product is classified as a combustible product. There is little risk of an explosion from this product if commercial quantities are involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.
Extinguishing Media:	Preferred extinguishing media are carbon dioxide, dry chemical, foam, water fog.
Fire Fighting:	When fighting fires involving significant quantities of this product, wear a splash suit complete with self contained breathing apparatus. Do not scatter spilled material with high pressure water jets.
Flash point:	>61 °C
Upper Flammability Limit:	No data.
Lower Flammability Limit:	No data.
Autoignition temperature:	No data.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spills & Disposal

Clean up immediately. Wear protective equipment to prevent skin and eye contamination. Contain using sand or soil – prevent run off into drains and waterways. Use adsorbent (soil, sand or other inert material). Collect and seal in properly labelled containers for disposal. Alkali's, i.e. lime and soda ash hasten decomposition of chlorpyrifos.

Triple rinse containers, add rinsings to spray tanks and send containers for recycling or if not recycling, break, crush or puncture and bury empty containers in a local authority landfill or in accordance with local, state or federal regulation. Do not dispose of undiluted chemicals on site.

SECTION 7 – HANDLING AND STORAGE

Store in the original container, tightly closed, away from food, seeds, fertilisers and pesticides. Keep out of reach of children. After handling, remove protective clothing and equipment, wash hands before eating, drinking, chewing gum, smoking or using toilet. See product label for further handling and storage precautions.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits:	No exposure limits have been assigned for this product by WorkSafe NZ
Protective Equipment:	When opening the container, preparing spray and when contact with concentrate or solution is likely; wear full eye and respiratory protection (organic vapour minimum), chemically resistant gloves and boots, impermeable apron or chemical resistant suit worn over cotton overalls. Cotton overalls should be buttoned to the neck and wrist.
Engineering Controls:	Handle in well ventilated area. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below exposure limits. Avoid inhalation of vapours and/or spray mist.
Hygiene Precautions:	Do not eat, drink or smoke while using this product. Remove protective clothing and wash hands and face before meals and after work. Wash protective clothing daily after work.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear brown liquid
Odour: Non-specific
Specific Gravity: 1.08
Solubility in Water: Emulsify in water
Flash Point: >61 °C
Other Information: (EC) Emulsifiable concentrate

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability: This product is unlikely to react or decompose under normal storage conditions.
Conditions to avoid: This product should be kept in a cool place, preferably below 30 °C.
Incompatibilities: Strong oxidising agents.
Polymerisation: This product is unlikely to undergo polymerisation processes.

SECTION 11 – TOXICOLOGICAL INFORMATION

Chronic Effects: Repeated exposure could result in peripheral nervous system damage.
Acute Toxicity – Oral: LD₅₀ (rats) 95 - 270 mg/kg for chlorpyrifos
LD₅₀ (mice) 60 mg/kg for chlorpyrifos
LD₅₀ (rabbits) 1000 mg/kg for chlorpyrifos
Acute Toxicity – Dermal: LD₅₀ (rats) >2000 mg/kg for chlorpyrifos
LD₅₀ (rabbits) 1000-2000 mg/kg for chlorpyrifos
Acute Toxicity – Inhalation: LC₅₀ (rats) (4hr) >0.2 mg/l

Chronic toxicity

Repeated or prolonged exposure to organophosphates may result in the same effects as acute exposure including the delayed symptoms, other effects reported in workers repeatedly exposed include impaired memory and disorientation, irritability, headache, concentration, severe depression, speech difficulties, delayed reaction times, nightmares, sleepwalking, and drowsiness or insomnia. An influenza-like condition with headache, weakness, loss of appetite, and malaise has also been reported.

SECTION 12 – ECOLOGICAL INFORMATION

Effects on birds

Chlorpyrifos is moderately to very highly toxic to birds.
LD₅₀ for pheasants is 8.41mg/kg
LD₅₀ for mallard ducks is 112 mg/kg
LD₅₀ for chickens is 32mg/kg

Effects on aquatic organisms

Chlorpyrifos is very highly toxic to freshwater fish, aquatic invertebrates and estuarine and marine organisms.
LC₅₀ (96 hr) for chlorpyrifos in mature rainbow trout is 0.009 mg/l
LC₅₀ (96 hr) for chlorpyrifos in lake trout is 0.098 mg/l
LC₅₀ (96 hr) for chlorpyrifos in goldfish is 0.01 mg/l
LC₅₀ (96 hr) for chlorpyrifos in fathead minnow is 0.331 mg/l

Acute Toxicity – Other Organisms

Aquatic and general agricultural uses of chlorpyrifos pose a serious hazard to wildlife and honeybees.

SECTION 13 – DISPOSAL CONSIDERATIONS

Disposal: Instructions concerning the disposal of this product and its containers are given on the product label. These should be carefully followed.

SECTION 14 – TRANSPORT INFORMATION

UN Number (Sea Transport): 3018

IMO Proper Shipping: ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC (chlorpyrifos, 50%), Class 6.1, Packing Group III.

SECTION 15 – REGULATORY INFORMATION

National and or International Regulatory Information

Registered pursuant to the ACVM Act 1997, No. P9013

See www.nzfsa.govt.nz/acvm/ for registration conditions

Approved pursuant to the HSNO Act 1996, Approval Code HSR000224

See www.ermanz.govt.nz for approval controls

SECTION 16 – OTHER INFORMATION

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

CONTACT POINT:

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