

MATERIAL SAFETY DATA SHEET

Statement of Hazardous Nature:

Hazardous according to criteria of NOHSC.

Company:	Kenso Corporation (M) Sdn Bhd
Address:	Kirkland Corner H/177, Old Cleveland Rd. Coorparoo Queensland 4151
Telephone Number:	(07) 3847 4288
Facsimile Number:	(07) 3847 4188
Emergency Telephone Number:	000 (Police or Fire Brigade) 131126 (Poisons Information Centre)

IDENTIFICATION

Product Name:	Kenso Agcare Tal-Ken 100 Insecticide/Miticide
Other names:	None
UN Number:	Not regulated
Hazchem Code:	Not regulated
Dangerous Goods Class:	Not regulated
Poison Schedule:	S6
Manufacturer's Product Code:	None
Use:	For the control of helioverpa Spp. In cotton, tomatoes, Lucerne seed crops, navy beans; certain species of mites in bananas, cotton and tomatoes; long tailed mealy bug in pears; banana weevil borer and banana rust thrips in bananas; mirids in cotton; whitefly in tomatoes; and red legged earth mite, blue oat mite, bryobia mite, webworm and brown pasture looper in faba beans, subterranean clover, clover, canola, wheat, barley, field peas, lupins and Lucerne; and certain species or wireworms in cotton and sugarcane; fig longicorn in grapes and citrus leaf eating weevil in citrus as per the directions for use.

Physical Description/Properties

Form:	Liquid
Colour:	Light Brown
Odour:	Solvent
Melting point (°C):	N/A
Boiling point (°C):	N/A
Specific Gravity:	0.933
Vapour Pressure:	N/A
Flash Point	68
Flammability Limits:	N/A
Solubility	Dispersible in water

Ingredients

Chemical entity	CAS number	Proportion
Bifenthrin	82657-04-3	11%
Surfactants		7-10%
Solvent	64742-95-6	Up to 100%

HEALTH HAZARD INFORMATION**Acute:****Swallowed:**

Considered an unlikely route of entry in commercial/industrial environments. The liquid is highly discomforting and may be toxic if swallowed, even fatal if swallowed in quantity. Ingestion may result in nausea, pain, vomiting. Vomit entering the lungs by aspiration may cause potentially lethal chemical pneumonitis. Ingestion of petroleum hydrocarbons can irritate the pharynx, oesophagus, stomach and small intestine, and cause swellings and ulcers of the mucous. Symptoms include a burning mouth and throat; larger amounts can cause nausea and vomiting, narcosis, weakness, dizziness, slow and shallow breathing, abdominal swelling, unconsciousness and convulsions. Damage to the heart muscle can produce heart beat irregularities, ventricular fibrillation (fatal) and ECG changes. Can be depressed the central nervous system. Light species can cause a sharp tingling of the tongue and cause loss of sensation there. Aspiration can cause cough, gagging, pneumonia with swelling and bleeding.

Skin:

The liquid is discomforting to the skin and may cause drying of the skin, which may lead to dermatitis. Toxic effects may result from skin absorption.

Inhaled:

The vapour/mist is discomforting to the upper respiratory tract. Inhalation hazard is increased at higher temperatures. Acute effects from inhalation of high vapour concentrations may be chest and nasal irritation with coughing, sneezing, headache and even nausea. If exposure to highly concentrated solvent atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and possible death. Inhaling high concentrations of mixed hydrocarbons can cause narcosis with nausea, vomiting and light headedness. Low molecular weight (C2-C12) hydrocarbons can irritate mucous membranes and cause incoordination, giddiness, nausea, vertigo, confusion, headache, appetite loss, drowsiness, tremors and stupor. Massive exposures can lead to severe central nervous system depression, deep coma and death. Convulsion can occur due to brain irritation and/ or lack of oxygen. Permanent scarring may occur, with epileptic seizures and brain bleeds occurring months after exposure. Respiratory system effects include inflammation of the lungs with oedema and bleeding. Lighter species mainly cause kidney and nerve damage; the heavier paraffins and olefins are especially irritant to the respiratory system. Alkenes produce pulmonary oedema at high concentrations. Liquid paraffins may produce sensation loss and depressant actions leading to weakness, dizziness, slow and shallow respiration, unconsciousness, convulsions and death. C5-7 paraffins may also produce multiple nerve damage. Aromatic hydrocarbons accumulate in lipid rich tissues (typically the brain, spinal cord and peripheral nerves) and may produce functional impairment manifested by non-specific symptoms such as nausea, weakness, fatigue, vertigo; severe exposure may produce inebriation or unconsciousness. Many of the petroleum hydrocarbons can sensitise the heart and may cause ventricular fibrillation, leading to death.

Eye:

The liquid produces a high level of eye discomfort and is capable of causing pain and severe conjunctivitis. Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated. The spray mist is highly discomforting to the eyes. The vapour when concentrated has pronounced eye irritation effect and this gives some warning of high vapour concentrations. If eye irritation occurs seek to reduce exposure with available control measures, or evacuate area.

Chronic:

Principle routes of exposures are usually by inhalation of vapour/ spray mist and skin contact with the material. Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. Constant or exposure over long periods to mixed hydrocarbons may produce stupor with dizziness, weakness and visual disturbance, weight loss and anaemia, and reduced liver and kidney function. Skin exposure may result in drying and cracking and redness of the skin. Chronic exposure to lighter hydrocarbons can cause nerve damage, peripheral neuropathy, bone marrow dysfunction and psychiatric disorders as well as damage the liver and kidneys.

Bifenthrin produced tumours following repeated exposure by dogs, rats, rabbits and mice to Bifenthrin. Bifenthrin is not genotoxic. Prolonged or continuous skin contact with the liquid may cause defatting with drying, cracking, irritation and dermatitis following.

First Aid

Swallowed:	If poisoning occurs, contact a doctor or Poisons Information Centre. If swallowed, and if more than 15 minutes from a hospital: INDUCE vomiting with fingers down the back of the throat, ONLY IF CONSCIOUS. Lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. NOTE: Wear a protective glove when inducing vomiting by mechanical means. REFER FOR MEDICAL ATTENTION WITHOUT DELAY. In the mean time, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient condition. If the services of a medical officer or medical doctor are readily available, the patient should be placed in his /her care and a copy of the MSDS should be provided. Further action will be the responsibility of the medical specialist. If medical attention is not available on the worksites or surroundings send the patient to a hospital together with a copy of the MSDS.
Skin:	If skin contact occurs, remove contaminated clothing and wash skin thoroughly. If irritation occurs seek medical advice.
Eyes:	If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.
Inhaled:	Remove victim from area of exposure – avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Advice to Doctor

Treat symptomatically. In cases of skin contact with synthetic pyrethroids, it has been reported that tropical application of Vitamin E cream has a therapeutic value, eliminating almost 100% of the skin pain associated with synthetic pyrethroids.

PRECAUTIONS FOR USE**Exposure Standards**

No value assigned for this specific material by the National Occupational Health and Safety Commission.

Engineering Control Measures

IN THE WORKPLACE: Use in well ventilated areas. Use with local exhaust ventilation or while wearing organic vapour/ particulate respirator. Keep containers closed when not in use.

Personal Protective Measures

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, RESPIRATOR.

Flammability

This product is classified as a C1 (COMBUSTIBLE LIQUID) for the purpose of storage & handling, in accordance with the requirements of AS 1940. Refer to State Regulations for Storage and Transport requirements.

SAFE HANDLING INFORMATION

Storage and Transport

SUITABLE CONTAINER

Metal can or drum
Packaging as recommended by manufacturer.
Check all containers are clearly labelled and free from leaks.

STORAGE INCOMPATIBILITY

Avoid storage with oxidisers.

STORAGE REQUIREMENTS

Store in original containers.
Keep containers securely sealed.
No smoking, naked lights or ignition sources.
Store in a cool, dry, well-ventilated area.
Store away from incompatible materials and foodstuff containers.
Protect containers against physical damage and check regularly for leaks.
Observe manufacturer's storing and handling recommendations.

Spills and Disposal

MINOR SPILLS

Slippery when spilt.
Remove all ignition sources.
Clean up all spills immediately.
Avoid breathing vapours and contact with skin and eyes.
Control personal contact by using protective equipment.
Contain and absorb spill with sand, earth, inert material or vermiculite.
Wipe up.
Place in a suitable labelled container for waste disposal.
Wash spill area with detergent and water.

MAJOR SPILLS

Slippery when spilt.
Moderate hazard.
Clear area of personnel and move upwind.
Alert Fire Brigade and tell them location and nature of hazard.
Wear breathing apparatus plus protective gloves.
Prevent, by any means available, spillage from entering drains or course.
No smoking, naked lights or ignition sources.
Increase ventilation.
Stop leak if safe to do so.
Contain spill with sand, earth or vermiculite.
Collect recoverable product into labelled containers for recycling.
Absorb remaining product with sand, earth or vermiculite.
Collect solid residues and seal in labelled drums for disposal.
Wash area and prevent runoff into drains.
If contamination of drains or waterways occurs, advise emergency services.

DISPOSAL

Consult manufacturer for recycling options and recycle where possible.
Consult State Land Waste Management Authority for disposal.
Incinerate residue at an approved site.
Recycle containers if possible, or dispose of in an authorised landfill.

Fire/Explosion Hazards

Combustible.
Slight fire hazard when exposed to heat or flame.
Heating may cause expansion or decomposition leading to violent rupture of containers.
On combustion, may emit toxic fumes of carbon monoxide (CO).
May emit acrid smoke.
Mists containing combustible materials may be explosive.
Other decomposition products include carbon monoxide (CO), hydrogen fluoride and hydrogen chloride.

Extinguishing Media:

Alcohol stable foam.
Dry chemical powder.
Carbon dioxide.
Water spray or fog – large fires only.

OTHER INFORMATION

Toxicity Data:

Bifenthrin:
48hr LC₅₀ (daphnia magna): 0.00016mg/L
96hr LC₅₀ (rainbow trout): 0.00015mg/L
96hr LC₅₀ (bluegill sunfish): 0.00035mg/L

Terrestrial toxicity:

Oral LD₅₀ (mallard duck): harmful to terrestrial species. Harmful to bees. 2,150 mg/kg
Oral LD₅₀ (bobwhite quail): 1,800 mg/kg
Oral LD₅₀ (µg/bee): 0.1 µg/bee
Contact LD₅₀ (µg/bee): 0.0146 µg/bee

CONTACT POINT:

Police and Fire Brigade:	Dial	000
National Poisons Information Centre:	Dial	13 1126 (from anywhere in Australia)
For 24 hour emergency response:	Dial	0439 933 556
		Ask for Murray Goodlich