

MATERIAL SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name: Kenso Agcare Ken-Tac 100 Insecticide
Product Type: Group 3A Insecticide
Company Name: Kenso Corporation (M) Sdn Bhd
Address: Unit 3C, 59, Oxford Street, Bulimba Queensland 4171
Telephone Number: (07) 3217 9788
Facsimile Number: (07) 3217 9733
Emergency Telephone Number: 000 (Police or Fire Brigade)
13 11 26 (Poisons Information Centre)
Use: For the control of insect pests including heliothis (*Helicoverpa* spp.) on various crops and red legged earth mite and blue oat mite on certain field crops and pastures and certain pests on fruit and vegetable crops.

SECTION 2 – HAZARDS IDENTIFICATION

Hazard Classification: Hazardous according to criteria of NOHSC Australia.
Not subject to the ADG Code when transported by Road or Rail. (ADG 7, Special Provision AU01).
Risk Phrase(s): R21/22 Harmful in contact with skin and if swallowed.
R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.
Safety Phrase(s): S20, 24/25. When using, do not eat and drink. Avoid contact with skin and eyes.
SUSDP Classification: S6
ADG Classification: Class 9
UN Number: 3082

Emergency Overview

Physical Description & colour: Clear pale brown liquid.

Odour: Characteristic hydrocarbon odour.

Major Health Hazards: The onset of symptoms varies depending upon such factors. In patients with occupational poisoning, skin symptoms usually develop within 4-6 hours after exposure, with systemic symptoms occurring as late as 48 hours after exposure. Paraesthesia of the facial skin can develop approximately 30 minutes after exposure and does not usually last beyond 24 hours when exposure is terminated. Following ingestion, the initial symptoms involve the gastrointestinal tract, developing 10-60 minutes after exposure. Patients suffering from acute oral poisoning usually develop prominent digestive symptoms such as epigastric pain, nausea and vomiting. Severely poisoned patients may have frequent convulsive attacks, coma, or pulmonary oedema. The prognosis is good if treated, with usually full recovery even in severely poisoned patients. (The hospitalisation period is usually longer than 4 weeks).

Potential Health Effects

Health Effects

Acute:

Swallowed: Harmful.

Eye: May cause irritation.

Skin: Maybe harmful. Repeated or prolonged exposure may cause irritant contact dermatitis. If substantial contact occurs, it could cause facial numbness.

Inhaled: Maybe harmful. Inhalation of aromatic hydrocarbon vapours may cause dizziness, disturbances of vision, and irritation to the eyes, skin and mucous membranes of the respiratory and gastrointestinal tract.

Chronic:

Animal studies have been undertaken on the active ingredient, alpha-cypermethrin. These studies show that the active can act on the nervous system and produce excitatory effects predominately on the sensory nerve endings. The technical does not cause teratogenicity or reproductive toxicity nor is it a carcinogen.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
Alpha-cypermethrin	67375-30-8	10 % w/v
Liquid hydrocarbon	64742-94-5	60 – 80% w/v
Other ingredients	secret	To 100 % w/v

SECTION 4 – FIRST AID MEASURES

Swallowed	If poisoning occurs, contact a doctor or Poisons Information Centre (Tel 131126)
Eye	Irrigate with copious quantities of water for at least 15 minutes. In all cases of eye contamination it is sensible precaution to seek medical advice.
Skin	Wash contaminated skin with plenty of water. Remove contaminated clothing and wash before re-use. If irritation occurs seek medical advice.
Inhaled	Remove victim from 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

Contains a synthetic pyrethroid insecticide. Treatment is symptomatic.

NB : This product also contains liquid hydrocarbon. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary oedema.

SECTION 5 – FIRE FIGHTING MEASURES

Fire/Explosion Hazard**Specific hazards**

Combustible liquid

Fire fighting further advice

Combustible liquid. Material may support combustion at elevated temperatures. Sealed, overheated containers may present explosion hazard. Thermal decomposition and burning may produce toxic-by-products.

Suitable extinguishing media

Water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder)

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.

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

Storage

Store in the closed, original container in a well-ventilated area. Do not store for prolonged periods in direct sunlight.

Classified as a C1 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.

Transport

This product is not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG) for the Transport by Road and Rail.

DG Not to be loaded with explosives (Class 1), oxidising agents (Class 5.1), organic peroxides (Class 5.2), however exemptions may apply.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards:

No value assigned for this specific material by National Occupational health and Safety Commission (Worksafe Australia)

Engineering Controls:

Natural ventilation should be adequate under normal use conditions. Keep containers closed when not in use.

Personal Protection

Harmful if swallowed. Will irritate the eyes and skin. Facial skin contact may cause temporary facial numbness. Avoid contact with eyes and skin. Avoid inhaling vapour or spray mist. When preparing spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and a face-shield or goggles. If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

After each day's use, wash gloves, face shield or goggles and contaminated clothing.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Colour:	Clear straw liquid
Odour:	Aromatic odour
Boiling point (°C):	Not applicable
Vapour Pressure:	Not applicable
Specific Density:	0.93 ± 0.01
Flashpoint:	62 °C
Flammability Limits:	Not applicable
Solubility in Water:	Forms emulsion

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability: Do not store below 4°C.

Hazardous Reactions: The product crystallises at low temperatures.
Hazardous Polymerization: Keep away from strong oxidising agents.
Hazardous polymerisation is not possible.

SECTION 11 – TOXICOLOGICAL INFORMATION

Chronic Effects: Repeated exposure could result in peripheral nervous system damage.
Acute Toxicity – Oral: LD₅₀ (rat) 79 - 474 mg/kg for alpha-cypermethrin technical
Acute Toxicity – Dermal: LD₅₀ (rat) >2000 mg/kg for alpha-cypermethrin
LD₅₀ (rabbit) >2000 mg/kg for alpha-cypermethrin
Acute Toxicity – Inhalation: LC₅₀ (rat) (4hr) >0.32 mg/l

Other Information

The Australian Acceptable Daily Intake (ADI) for alpha-cypermethrin for a human is 0.05 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 4.7 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing, 'ADI List', TGA, June 2006).

SECTION 12 – ECOLOGICAL INFORMATION

Persistence / Degradability

Average field half life of alpha-cypermethrin is 90 days.

Known Harmful Effects on the Environment

Alpha-cypermethrin products do not appear to pose any threat to birds. The product is a marine pollutant for sea transport. Alpha-cypermethrin is toxic to fish.

Acute Toxicity – Fish

The following is data for the active ingredient, alpha-cypermethrin.
Toxic to fish. LC₅₀ (96hr) for rainbow trout is 0.0028 mg/l.

Acute Toxicity – Daphnia

LC₅₀ (48 hr) for alpha-cypermethrin is 0.0003 mg/l.

Acute Toxicity – Other Organisms

Birds: Not toxic to birds. LD₅₀ for mallard duck is >10,000 mg/kg
Bees: Toxic to bees. LD₅₀ 0.059 µg/bee.
Should not be applied while bees are actively foraging.

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

Not subject to the ADG Code when transported by Road or Rail. (ADG 7, Special Provision AU01).

UN Number: 3082
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(CONTAINS ALPHA-CYPERMETHRIN)
SUSDP Classification: S6

ADG Class: Class 9
Hazchem Code: 3Z
Packing Group: III

SECTION 15 – REGULATORY INFORMATION

SUSDP Classification S6
Packaging & Labelling POISON
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING
AICS (Australia) All of the components in this product are listed on the Australian Inventory of Chemical Substances.

SECTION 16 – OTHER INFORMATION

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

Acronyms:

ADG Code Australian Code for the Transport of Dangerous Goods by Road and Rail
AICS Australian Inventory of Chemical Substances
CAS number Chemical Abstracts Service Registry Number
Hazchem Number Emergency action code of numbers and letters that provide information to emergency services especially firefighters
IARC International Agency for Research on Cancer
NOHSC National Occupational Health and Safety Commission
SUSDP Standard for the Uniform Scheduling of Drugs & Poisons
UN Number United Nations Number

CONTACT POINT:

Police and Fire Brigade:	Dial	000
National Poisons Information Centre:	Dial	13 11 26 (from anywhere in Australia)
For 24 hour emergency response:	Dial	0439 933 556 Ask for Murray Goodlich