

SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name: Kenso Agcare Ox 240 Herbicide
Product Type: Group G Herbicide
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 selective control of certain broadleaf and grass weeds as per the directions for use table on the label.

SECTION 2 – HAZARDS IDENTIFICATION

Hazard Classification: Classified as hazardous according to criteria of Safe Work Australia.
Not classified as a Dangerous Good according to the ADG Code.



GHS Signal Word: DANGER

Hazard statements:
H227: Combustible liquid.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation
H319: Causes serious eye irritation.
H360: May damage fertility or the unborn child.
H410: Very toxic to aquatic life with long lasting effects.

Prevention:
P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from heat/sparks/open flames/hot surfaces — No smoking.
P264: Wash contacted areas thoroughly after handling.
P273: Avoid release to the environment.
P280: Wear protective gloves, protective clothing and eye or face protection.

Response:
P281: Use personal protective equipment as required.
P331: Do NOT induce vomiting.
P338: Remove contact lenses, if present and easy to do. Continue rinsing.
P362: Take off contaminated clothing and wash before reuse.
P391: Collect spillage.
P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P332 + P313: If skin irritation occurs: Get medical advice/attention.

	P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P337 + P313: If eye irritation persists: Get medical advice/attention.
	P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
	P308 + P313: IF exposed or concerned: Get medical advice/attention.
Storage:	P405: Store locked up.
Disposal:	P501: Dispose of contents and containers as specified on the registered label.
SUSMP Classification:	S5
ADG Classification:	N/A
UN Number:	N/A

Emergency Overview

Physical Description & colour: Clear, amber liquid.

Odour: Aromatic odour.

Major Health Hazards: Oxyfluorfen is practically non-toxic by ingestion, with report oral LD₅₀ values of 5000 mg/kg in both rats and dogs, and 2700 to 5000 mg/kg in mice. The dermal LD₅₀ is greater than 5000 mg/kg in both rats and rabbits, also indicating slight toxicity by this route. It causes no skin irritation in rabbits, no skin sensitization in guinea pigs, and moderate eye irritation in rabbits.

Potential Health Effects

Health Effects

Acute:

Swallowed:	The concentrate is of low toxicity if swallowed. If aspirated into the lung, e.g. from vomiting, the presence of solvent may result in chemical pneumonitis or other lung damage.
Eye:	May cause irritation.
Skin:	May irritate the skin. Prolonged contact with the concentrate can cause defatting of the skin and may result in dermatitis.
Inhaled:	High vapour concentrations of the solvent while handling the concentrate are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, and may have other central nervous system effects.

Chronic:

Liver and kidney damage has been noted in laboratory animals that have been fed excessive doses of oxyfluorfen.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
Oxyfluorfen	42874-03-3	24%w/v
Inert ingredients	secret	<15 w/v
Liquid hydrocarbon	64742-94-5	to 100%w/v

SECTION 4 – FIRST AID MEASURES

Swallowed:	If swallowed, DO NOT induce vomiting. Seek medical advice or contact Poisons Information Centre (Ph 13 11 26)
Eye:	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open.
Skin:	Remove contaminated clothing and launder before use. Wash affected areas or skin thoroughly with soap and water. Seek medical advice if irritation develops.
Inhaled:	Remove to fresh air until recovered. If symptoms persist, seek medical advice.

Advice to Doctor:

Treat symptomatically. If vomiting occurs, solvent present may cause pulmonary pneumonitis.

SECTION 5 – FIRE FIGHTING MEASURES

Specific Hazard

Product is a combustible liquid, (C1)

Fire/Explosion Hazard

Dangerous Decomposition or Combustion Products

Thermal Decomposition

None. If involved in a fire, it will emit carbon monoxide, phosgene, hydrogen chloride and possibly hydrogen fluoride.

Hazchem Code

None Allocated

Decomposition Temperature

Not known, stable at 100°C

Extinguishing Media

Water fog, foam, carbon dioxide or dry chemical.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spills & Disposal

Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite). Collect spilled material and waste in sealable open-top type containers for disposal. On-site disposal of concentrate is not acceptable.

Environmental Precautions

This product is a herbicide and spills can damage crops, pastures and desirable vegetation.

SECTION 7 – HANDLING AND STORAGE

Handling

When handling this product, do not eat, drink or smoke.

When mixing this product always wear a PVC or rubber apron, elbow length PVC gloves, face shield or goggles and overalls buttoned at the wrist and neck.

When spraying this product, wear a face shield or goggles

After each days use, wash gloves, face shield or goggles and overalls.

If product gets on skin, immediately wash area with soap and water.

Storage

Store in the closed, original container in a well-ventilated area as cool as possible out of direct sunlight. Keep from contact with fertilisers and seeds.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

National Exposure Standards

The manufacturer of the solvent has recommended an occupational exposure limit of 100 mg/m³; 15ppm TWA, as total hydrocarbon. NOHSC has set the following exposure standard for N-methyl pyrrolidone : TLV (TWA) 103 mg/m³, STEL 309 mg/m³. SK 'SK' notice - absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

Engineering Controls

Handle in well ventilated areas, generally natural ventilation is adequate.

Personal Protective Equipment

When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length butyl gloves and goggles.

Requirements Concerning Special Training

NSW regulations require that people who use pesticides in their job or business must have training in the application of the materials. By 1st September, 2005 all users must have received such training.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form:	liquid
Colour:	amber
Odour:	aromatic odour
Vapour Pressure:	0.0267 mPa @ 25 °C for oxyfluorfen
Flashpoint:	100 °C
Flammability:	Combustible liquid, (C1)
Specific Gravity:	1.08 ± 0.01
Solubility	Emulsify in water

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability

Stable under normal conditions.

Hazardous Reactions

Keep away from strong oxidising agents.

Hazardous Polymerization

Hazardous polymerisation is not possible.

SECTION 11 – TOXICOLOGICAL INFORMATION

Toxicology Information

No harmful effects are expected if the precautions on the label and this MSDS are followed.

Acute Toxicity – Oral

LD₅₀ (rat) >5,000 mg/kg for oxyfluorfen

Acute Toxicity – Dermal

LD₅₀ (rabbit) >10,000 mg/kg for oxyfluorfen

Acute Toxicity – Inhalation

LC₅₀ (rat) (4hr) >5.4 mg/l

Other Information

The Australian Acceptable Daily Intake (ADI) for oxyfluorfen for a human is 0.025 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 2.5 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, September 2006).

SECTION 12 – ECOLOGICAL INFORMATION

Acute Toxicity – Fish

The following is data for the active ingredient, oxyfluorfen.

LC₅₀ (96 hr) for trout is 0.41 mg/l.

LC₅₀ (96 hr) for bluegill sunfish is 0.2 mg/l.

Acute Toxicity – Daphnia

LC50 (48 hr) for daphnia is 1.5 mg/l for oxyfluorfen.

Acute Toxicity – Other Organisms

Birds: Not toxic to birds. LD₅₀ for bobwhite quail is >2,250 mg/kg

Bees: Not toxic to bees. LD₅₀ >25 µg/bee.

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

Transport	Considered non dangerous for road and rail transport (in packaging) by the Australian Code for the Transport of Dangerous Goods by Road and Rail. Ref: ADG7; SP No. AU01.
UN Number (Sea Transport):	3082
IMO Class/Packing Group:	Class 9; Packing Group III
IMO Marine Pollutant:	Marine Pollutant
IMO Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains oxyfluorfen)

SECTION 15 – REGULATORY INFORMATION

SUSMP Classification	S5
Packaging & Labelling	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING

SECTION 16 – OTHER INFORMATION

This SDS 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
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
SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons
UN Number	United Nations Number
GHS	Globally Harmonised System

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	