

SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name:	Kenso Agcare Fluroken 333 Herbicide
Product Type:	Group 4 Herbicide
Company Name:	Kenso Corporation (M) Sdn Bhd
Address:	Level 1, 98 Commercial Road, Teneriffe QLD 4005
Telephone Number:	(07) 3216 1188
Emergency Telephone Number:	000 (Police or Fire Brigade) 13 11 26 (Poisons Information Centre)
Use:	For the control of a wide range of broadleaf weeds in fallow, lucerne, maize, millets, pastures, poppies, sorghum, sugar cane, sweetcorn, winter cereals. Also for the control of woody weeds in agricultural non-crop areas, commercial and industrial areas, forests, pastures and rights-of-way, as specified in the Directions For Use.

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.



Classification of the Hazardous Chemical: Flammable liquids – Category 4
Aspiration hazard – Category 1
Skin corrosion/irritation – Category 2
Skin sensitization – Category 1
Serious eye damage/eye irritation -Category 2/2A
Specific target organ toxicity (Single exposure) – Category 3
Hazardous to the aquatic environment, long term – Chronic 1

GHS Signal Word: **DANGER**

Hazard statements: H227: Combustible liquid.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.
H410: Very toxic to aquatic life with long lasting effects.
Prevention: P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P264: Wash contacted areas thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.

Response: P272: Contaminated work clothing should not be allowed out of the workplace.
 P273: Avoid release to the environment.
 P280: Wear protective gloves/protective clothing/eye protection/ face protection.
 P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/ doctor/ physician.
 P302+P352: IF ON SKIN: Wash with plenty of soap and water.
 P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P312: Call a POISON CENTER/doctor/physician if you feel unwell.
 P321: Specific treatment (see FIRST AID on this label).
 P331: DO NOT induce vomiting.
 P332+P313: If skin irritation occurs: Get medical advice/attention.
 P333+P313: If skin irritation or rash occurs: Get medical advice/ attention.
 P337+P313: If eye irritation persists: Get medical advice/attention.
 P362+P364: Take off contaminated clothing and wash it before reuse.
 P370+P378: In case of fire: Use water fog, foam, dry agent (carbon dioxide, dry chemical powder) to extinguish.
 P391: Collect spillage.

Storage: P403+P233: Store in a well-ventilated place. Keep container tightly closed.
 P403: Store in a well-ventilated place.
 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: Brown to dark brown liquid.

Odour: Aromatic solvent odour.

Potential Health Effects: May irritate eyes and skin. May cause allergic disorders.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
Fluroxypyr (present as methyl heptyl ester)	81406-37-3	33.3%
Inert ingredients	secret	<20%
Liquid hydrocarbon	64742-94-5	to 100%

SECTION 4 – FIRST AID MEASURES

Inhalation:	If affected, remove to fresh air until recovered. See a doctor if discomfort or irritation continues.
Skin contact:	If on skin, remove contaminated clothing, wash skin with plenty of soap and water. See a doctor if any signs or symptoms described in this document occur.
Eye contact:	If in eyes, flush eyes immediately with plenty of fresh water for at least 15 minutes while holding the eyelids open.
Ingestion:	If swallowed, DO NOT induce vomiting. Give a glass of water. Seek medical advice immediately.

Advice to Doctor:

This product contains petroleum solvents. If lavage is performed, endotracheal or oesophagoscopy control is advisable.

SECTION 5 – FIRE FIGHTING MEASURES

Specific Hazard

Product is a combustible liquid, (C1)

Fire fighting equipment

Use positive-pressure, self-contained breathing apparatus and full protective equipment.

Extinguishing Media

Foam, carbon dioxide or dry chemical.

Special Fire Fighting Procedures

When fighting fires involving significant quantities of this product, wear safety boots, non-flammable overalls, gloves, hat, goggles and self-contained breathing apparatus. All skin areas should be covered. Ensure that no spillage enters drains or water courses.

Unusual Fire & Explosion Hazards

There is a moderate risk of an explosion from this product if it is involved in a fire. Fire decomposition products from this product may form toxic and corrosive mixtures in confined spaces.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spills

Small spill: Apply absorbent material such as earth, sand or clay granules or cat litter to the spill. Sweep up material for disposal when absorption is complete and contain in a refuse vessel for Disposal (See Disposal). If necessary, wash the spill area with an alkali detergent and water and absorb as above the wash liquid for disposal.

Large spill: Place leaking containers into salvage drums. Apply absorbent material such as earth, sand or cat litter to the spill area. Form a barricade around spill and in front of drains or waterways in spill vicinity, using earth or other available material. Sweep up material and contain in a refuse vessel for disposal (see Disposal).

Disposal

Triple rinse or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling container, replace cap and return clean containers to recycler or designated collection point. If not recycling break, crush, or puncture and

bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

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 day's 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

Exposure Standards

A time weighed average (TWA) concentration for an 8 hour day, and 5 day week has not been established by The National Occupational Health & Safety Commission for any of the major ingredients in this product. There is a blanket limit of 10mg/m³ for dusts or mists when limits have not otherwise been established. The nature of this product makes it unlikely that this level will be approached in normal use.

Engineering Control

In industrial situations, concentration values below the TWA value should be maintained. Values may be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high; you are advised to modify the process or environment to reduce the problem.

Personal Protection

Avoid contact with eyes and skin. When opening the container, preparing the spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves, a face shield or goggles. Wash hands after use and wash face before eating, drinking or smoking. After each day, wash glove, face shield or goggles and contaminated clothing.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Colour:	Brown to dark brown colour
Odour:	Aromatic solvent odour
Boiling Point (°C):	N/A
Flashpoint:	67 °C (PMCC)
Flammability:	Combustible Liquid, (C1)
Specific Gravity:	1.060 g/mL at 20 °C

Vapour Pressure: 135x10⁻³ mPa at 20 °C (Fluroxypyr methylheptyl ester)
Corrosiveness: Not corrosive
Solubility: Emulsify in water

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability

Stable under normal conditions.

Hazardous Decomposition Products

In fire noxious/irritating gases may be formed including oxides of carbon, oxides of nitrogen, hydrogen chloride and hydrogen fluoride.

Hazardous Polymerization

Not known to occur.

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute Toxicity – Oral

LD₅₀ (rat) >5,000 mg/kg

Acute Toxicity – Dermal

LD₅₀ (rabbit) >5,000 mg/kg

Acute Toxicity – Inhalation

LC₅₀ (rat) (4hr) >5.5 mg/l

Potential Health Effects

Health Effects

Acute:

Inhalation: The acute inhalation toxicity is low. Prolonged exposure to the solvent vapour from the concentrate may cause eye and respiratory irritation, headache, dizziness and narcotic effects.

Skin contact: The acute LD₅₀ (rabbit) is above 2000mg/kg (low toxicity).

Eye contact: May cause temporary, moderate eye irritation.

Ingestion: The oral LD₅₀ (rat) is above 5000mg/kg (low toxicity).

Chronic:

Rats and mice administered the active ingredient showed no increase in tumours over control groups. Studies on rats and rabbits showed Fluroxypyr does not increase birth defects or interfere with reproduction, nor cause genetic changes. Fluroxypyr does not accumulate in the body. The ingredients are not listed as carcinogenic in NOHSC's document "Exposure Standards for Atmospheric Contaminants in the Occupational Environment" (May 1995).

Systemic (Other Target Organ) Effects

Fluroxypyr did not cause birth defects in laboratory animals. Has been toxic to the foetus in laboratory at doses toxic to the mother.

Reproductive Effects

Fluroxypyr, in animal studies, did not interfere with reproduction.

Mutagenicity

For the active ingredient, in-vitro and animal genetic toxicity were negative.

Other information:

The ADI (Acceptable Daily Intake) for Fluroxypyr is set at 0.2mg/kg/day. The corresponding NOAEL (No-observable-adverse-effect-level) is set at 20mg/kg/day. *Data adopted from Australia ADI List, September 2024.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity Data

Fluroxypyr methyl heptyl ester has low toxicity to birds, honey bees and earth worms, and moderate toxicity to fish and aquatic organisms. Fluroxypyr methyl heptyl ester is rapidly degraded to Fluroxypyr acid which has low toxicity to fish, birds, honey bees, livestock and aquatic organisms. Fluroxypyr will not bio-accumulate in animal systems.

Environmental Fate

Fluroxypyr methyl heptyl ester is almost completely degraded to Fluroxypyr acid within one week in soil and water. Fluroxypyr acid is primarily degraded by microbial action. It has a half-life of about 3 to 6 days in soil under aerobic conditions depending on soil type and climatic conditions. In sterile water, Fluroxypyr acid has a half-life of 185 to 265 days depending on the pH. Fluroxypyr is not expected to move into ground water. Residues typically remain in the top 10 centimetres of a soil profile. If used according to the label directions, Fluroken 333 Herbicide will not be harmful to the environment.

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

ADG

UN Number:	3082
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains FLUROXYPYR-MEPHTHYL HEPTYL ESTER)
Class:	9
Packaging group:	III
Hazchem:	3Z
Storage and 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.

IMO-IMDG

UN Number:	3082
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Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S. (contains FLUROXYPYR-MEPHTYL HEPTYL ESTER)
Class: 9
Packaging group: III
Marine pollutant: Yes

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	1800 951 288 03 9573 3188