

MATERIAL SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name: Kenso Agcare Fiestar Non-Selective Herbicide
Product Type: Group N 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 non-residual control of broadleaf and grass weeds in various situations as specified in the Directions for Use Table.

SECTION 2 – HAZARDS IDENTIFICATION

Classified as hazardous according to criteria of NOHSC.

Risk Phrases: R21/22 – Harmful in contact with skin and if swallowed.
R36 – Irritating to eyes

Safety Phrases: See Sections 4, 5, 6, 7, 8, 10, 12, 13

SUSDP Classification: S5

ADG Classification: None allocated. Not a Dangerous Good.

UN Number: None allocated

Emergency Overview

Physical Description & colour: Blue liquid.

Odour: Odourless.

Hazard classification: Hazardous (National Occupational Health and Safety Commission - NOHSC)

Potential Health Effects

Acute:

Swallowed: Ingestion of this product may cause irritation, nausea, and vomiting.

Skin: Harmful if absorbed by skin contact. Will irritate the skin.

Inhaled: Harmful if inhaled.

Eye: Will cause irritation.

Chronic: Evidence from animal studies suggests the potential for impaired fertility or developmental toxicity on repeated or prolonged exposure.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
Glufosinate-ammonium	77182-82-2	20 % w/v
Inert ingredients	secret	30-60 % w/v
Water	7732-18-5	To 100%

SECTION 4 – FIRST AID MEASURES

Swallowed:	If swallowed, do not induce vomiting; seek medical advice immediately.
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. Discard contaminated non-waterproof shoes and boots. Wash contaminated clothing before re-wearing.
Eyes:	Flush eyes immediately with plenty of fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. However, if irritation persists, see a doctor.
Inhaled:	Remove to fresh air until recovered. See a doctor if discomfort or irritation continues.

Advice to Doctor

Treat symptomatically.

SECTION 5 – FIRE FIGHTING MEASURES

Fire/Explosion Hazard

Dangerous decomposition or Combustion Products

Thermal decomposition

Not a fire or explosion hazard

Hazardous decomposition products

In a fire, irritant and toxic fumes containing oxides of carbon, nitrogen, phosphorus and sulphur and other toxic substances may be generated.

Hazardous reactions

None known

Extinguishing Media

Extinguish fire with foam, dry powder, carbon dioxide or water spray.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spills and Disposal

Contain spill and absorb with sand or proprietary absorbent (vermiculite). Prevent from entering drains, waterways or sewers. Clean up spill immediately. Collect in sealed open-top containers for disposal. Triple rinse containers, and add rinsings to the spray tank, then offer container for recycling / reconditioning, or puncture top, sites and bottom and dispose of in landfill in accordance with local regulations. On-site disposal of concentrate is not acceptable.

SECTION 7 – HANDLING AND STORAGE

Storage and Transport

Store in the closed, original container in a well-ventilated area away from children, animals, food, feedstuffs, seed and fertilizers.

Considered non hazardous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits

NOHSC Exposure Standards:

Propylene glycol monomethyl ether (1-methoxy-2-propanol)

TLV-TWA 100 ppm, 369 mg/m³

TLV-STEL 150 ppm, 553 mg/m³

Exposure standard – Time Weighted Average (TWA) means the average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.

Exposure standard – Short term exposure limit (STEL) means a 15 minute TWA exposure which should not be exceeded at any time during the working day.

Engineering Control

Control process conditions to avoid contact. Use only in well-ventilated areas. If necessary, use local exhaust ventilation to keep airborne concentration below the exposure limits.

Protective Equipment

Poisonous if swallowed. Avoid contact with skin or clothing. Skin contact should be minimized by wearing protective clothing including elbow-length PVC gloves and face shield. If product contacts skin, immediately wash area with soap and water. After each use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. Wash gloves, face shield and contaminated clothing before reuse.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Colour:	Blue liquid
Odour:	Odourless
pH:	5.2-6.2 in 5% solution
Melting point (°C):	NA
Boiling point (°C):	96 °C
Specific Gravity:	1.11
Vapour Pressure:	Low
Flammability Limits:	NA
Solubility	Soluble in water

SECTION 10 – STABILITY AND REACTIVITY

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

Conditions to Avoid: Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

Incompatibilities: strong acids, strong bases, strong oxidising agents. Ammonia may be evolved in the presence of alkalis.

Fire Decomposition: Ammonia. In a fire, oxides of carbon, nitrogen, phosphorus and sulphur may be emitted.

Polymerisation: This product will not undergo polymerisation reactions.

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute:

Oral toxicity LD50 female rat: 1910 mg/kg (product)

LD50 male rat: 2170 mg/kg (product)

Dermal toxicity LD50 female rat: 1380 mg/kg (product)

LD50 male rat: 1400 mg/kg (product)

Inhalation toxicity LC50 female rat: 4.31 mg/L (4 hr) (product)

LC50 male rat: 3.22 mg/L (4 hr) (product)

Skin irritation Slightly irritating (rabbit) (product)

Eye irritation Moderately irritating (rabbit) (product)

Sensitisation Non-sensitising (guinea pig) (product)

Chronic:

In animal studies glufosinate-ammonium showed no teratogenic, carcinogenic, mutagenic or neurotoxic effects.

SECTION 12 – ECOLOGICAL INFORMATION

Glufosinate-ammonium is practically non-toxic to birds, fish, honeybees, earthworms and beneficial insects. It is practically non-toxic to Daphnia, but moderately toxic to sensitive aquatic species. It is expected to be slightly to moderately toxic to wild animals. DO NOT contaminate streams, rivers or waterways with the used containers.

Ecotoxicity

Glufosinate-ammonium:

Fish toxicity: LC50 (96 h) rainbow trout 710 mg/L

LC50 (96 h) carp, bluegill sunfish, golden orfe > 1000 mg/L

Bird toxicity: Eight day dietary LC50 Japanese quail > 5000 mg/kg

Daphnia toxicity: Daphnia magna EC50 (48 h) 560 – 1000 mg/L

Algal toxicity: LD50 for Scenedesmus subspicatus ≥ 1000 mg/L

LD50 for Scenedesmus capricornutum 37 mg/L

Environmental fate, persistence and degradability, mobility

Glufosinate-ammonium is very soluble in water and is hydrolytically and photolytically stable. It is rapidly degraded in surface levels of soils and in water. This product is considered to be readily biodegradable. The potential for groundwater contamination with glufosinate-ammonium is minimal. Glufosinate-ammonium does not accumulate in the fatty tissues of fish or other animals.

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: None Allocated

Proper Shipping Name: None Allocated

ADG Class: None Allocated

Hazchem Code: None Allocated

Packing Group: None Allocated

ADG Code: This product is not classified as a Dangerous Good. No special transport conditions are necessary unless required by other regulations.

SECTION 15 – REGULATORY INFORMATION

Poison schedule

S5

Packaging &

CAUTION

Labelling

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 Database.

SECTION 16 – OTHER INFORMATION

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

CONTACT POINT:

Police and Fire Brigade:

Dial

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National Poisons Information Centre:

Dial

13 11 26 (from anywhere in Australia)

For 24 hour emergency response:

Dial

0439933556

Ask for Murray Goodlich