


SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name:	Kenso Agcare Fiestar Non-Selective Herbicide
Product Type:	Group 10 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 non-residual control of broadleaf and grass weeds in various situations as specified in the Directions for Use Table.

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:	Acute toxicity (Oral) – Category 4 Acute toxicity (Dermal) – Category 4 Acute toxicity (Inhalation) – Category 4 Reproductive toxicity – Category 1 Reproductive toxicity – Category 2 Specific target organ toxicity (Repeated exposure) – Category 2
GHS Signal Word:	DANGER
Hazard statements:	H302: Harmful if swallowed. H312: Harmful in contact with skin. H332: Harmful if inhaled. H360: May damage fertility or the unborn child. H361: Suspected of damaging fertility or the unborn child. H373: May cause damage to organs through prolonged or repeated exposure.
Prevention:	P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P260: Do not breathe dust/fume/gas/mist/vapours/spray. P261: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P264: Wash contacted areas thoroughly after handling.

Response: P270: Do not eat, drink or smoke when using this product.
 P271: Use only outdoors or in a well-ventilated area.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.
 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.
 P308+P313: If exposed or concerned: Get medical advice/attention.
 P312: Call a POISON CENTER/doctor/physician if you feel unwell.
 P314: Get medical advice or attention if you feel unwell.
 P321: Specific treatment (see FIRST AID on this label)
 P330: Rinse mouth.
 P362+P364: Take off contaminated clothing and wash it before reuse.

Storage: P405: Store locked up.

Disposal: P501: Dispose of contents/container as specified on the registered label

SUSMP Classification: S5

ADG Classification: 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)

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

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

SECTION 4 – FIRST AID MEASURES

Inhalation:	Remove to fresh air until recovered. See a doctor if discomfort or irritation continues.
Skin contact:	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 contact:	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.
Ingestion:	If swallowed, do not induce vomiting; seek medical advice immediately.

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

Extinguishing Media

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

Fire Fighting

Breathable air apparatus should be worn when fighting a fire in which this product is involved.

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

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 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 Toxicity – Oral

LD₅₀ female rat: 1910 mg/kg (product)

LD₅₀ male rat: 2170 mg/kg (product)

Acute Toxicity - Dermal

LD₅₀ female rat: 1380 mg/kg (product)

LD₅₀ male rat: 1400 mg/kg (product)

Acute Toxicity – Inhalation

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)

Potential Health Effects

Acute:

Inhalation: Harmful if inhaled

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

Eye contact: Will cause irritation.

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

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

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 (data on 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

ADG

- UN Number:** None allocated.
- Proper shipping name:** None allocated.
- Class:** None allocated.
- Packaging group:** None allocated.
- Storage and Transport:** Not a dangerous good.

IMO-IMDG

- UN Number:** None allocated.
- Proper shipping name:** None allocated.
- Class:** None allocated.
- Packaging group:** None allocated.
- Marine pollutant:** None allocated.

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 0428 776 327

Ask for Russell Clark