

## 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

**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:**  
**Hazard statement:**

**DANGER**

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 fumes, mists, vapours or spray.  
P264: Wash contacted areas thoroughly after handling.  
P271: Use only outdoors or in a well-ventilated area.  
P280: Wear protective gloves, protective clothing and eye or face protection.

**Response:**

P314: Get medical advice or attention if you feel unwell.  
P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.  
P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P308 + P313: If exposed or concerned: Get medical advice/attention.

**Storage:** P405: Store locked up.  
 P403+P235: Store in a well-ventilated place. Keep cool.

**Disposal:** P501: Dispose of contents and containers as specified on the registered label.

**SUSMP Classification:** S5

**ADG Classification:** Not a dangerous good.

**UN Number:** N/A

### 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%w/v

### SECTION 4 – FIRST AID MEASURES

<b>Swallowed:</b>	If swallowed, do not induce vomiting; seek medical advice immediately.
<b>Skin:</b>	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.
<b>Eyes:</b>	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.
<b>Inhaled:</b>	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. 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 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**

**Exposure Limits**

NOHSC Exposure Standards:

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

TLV-TWA 100 ppm, 369 mg/m<sup>3</sup>

TLV-STEL 150 ppm, 553 mg/m<sup>3</sup>

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**

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

LD<sub>50</sub> female rat: 1910 mg/kg (product)

LD<sub>50</sub> male rat: 2170 mg/kg (product)

### Acute Toxicity - Dermal

LD<sub>50</sub> female rat: 1380 mg/kg (product)

LD<sub>50</sub> male rat: 1400 mg/kg (product)

### Acute Toxicity – Inhalation

LC<sub>50</sub> female rat: 4.31 mg/L (4 hr) (product)

LC<sub>50</sub> 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 (data on Glufosinate-ammonium):

Fish toxicity: LC<sub>50</sub> (96 h) rainbow trout 710 mg/L

LC<sub>50</sub> (96 h) carp, bluegill sunfish, golden orfe > 1000 mg/L

Bird toxicity: Eight day dietary LC<sub>50</sub> Japanese quail > 5000 mg/kg

Daphnia toxicity: Daphnia magna EC<sub>50</sub> (48 h) 560 – 1000 mg/L

Algal toxicity: LD<sub>50</sub> for Scenedesmus subspicatus ≥ 1000 mg/L

LD<sub>50</sub> 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. Not a dangerous good.  
**Hazchem Code:** None allocated.  
**Packing Group:** 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 0439933556  
Ask for Murray Goodlich