

## SAFETY DATA SHEET

### SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

**Product Name:** Fiestar 280 SL  
**Product Use:** Herbicide  
**Company Name:** Kenso Corporation (M) Sdn Bhd  
**Address:** B-9-3. PJ8, Block B West  
23 Jalan Barat, Petaling Jaya, Selangor 46050  
Malaysia  
**Telephone Number:** +603 7962 3636  
**Emergency Telephone Number:** 1-800-222-1222 (Medical Emergencies)  
1-800-424-9300 (Chemical Emergencies)

### SECTION 2 – HAZARDS IDENTIFICATION

**Hazard Classification:**

**OSHA Regulatory Status**

This product is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).



**Signal Word:**

**DANGER**

**Hazard statement:**

Harmful if swallowed.  
Harmful in contact with skin  
Harmful if inhaled.  
May damage fertility or the unborn child.  
Suspected of damaging fertility or the unborn child.  
May cause damage to organs through prolonged or repeated exposure

**Precautionary statement  
- Prevention**

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Do not breathe fumes, mists, vapours or spray.  
Wash contacted areas thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves, protective clothing and eye or face protection.

**-Response:**

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

- Storage:** Store locked up.  
Store in a well-ventilated place. Keep cool.
- Disposal:** Dispose of contents and containers as specified on the registered label.
- Other hazards** No other hazards known.

### 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

- General advice** When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
- Ingestion** Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.
- Skin contact** Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
- Eye contact** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.
- Inhalation** Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.

#### Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

#### Indication of any immediate medical attention and special treatment needed

**Treatment** Treat symptomatically.

### SECTION 5 – FIRE FIGHTING MEASURES

#### Extinguishing Media Suitable

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

#### Special hazards arising from the substance or mixture

In the event of fire the following may be released:., Hydrogen cyanide (hydrocyanic acid), Carbon monoxide (CO), Oxides of phosphorus, Nitrogen oxides (NOx)

### Special protective equipment for fire fighting

Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

Clean up spills immediately observing the precautions in Section 8 of this SDS. Isolate the hazard area and keep unnecessary and unprotected personnel from entering. In case of spill on floor or paved surfaces, mop up and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to label. Prevent material from contaminating soil or from entering sewage and drainage systems and bodies of water. Dike and contain the spill with inert material such as sand, earth, etc. Transfer liquid to containers and solid diking material to separate containers for recovery and disposal.

## SECTION 7 – HANDLING AND STORAGE

### Handling

Do not get in eyes, on skin or clothing. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Wash contaminated clothing before re-use. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### Storage

Do not use or store near heat or open flame. Keep the container tightly closed and dry in a cool, well-ventilated place. Storage temperature should not exceed 125° F. If storage temperature for bulk Fiestar 280 SL is below 32° F, the material should not be pumped until its temperature exceeds 32° F. Protect against direct sunlight.

## SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

### 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.

### Personal Protective Equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

### General Protective Measures

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water.

Keep and wash PPE separately from other laundry.

Eye wash facility and safety shower should be available.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical stated:</b>	Liquid
<b>Appearance:</b>	Red liquid
<b>Odor:</b>	Weakly pungent
<b>pH:</b>	6.0 – 8.0 at 100%
<b>Melting Point (°C):</b>	No data available

<b>Boiling Point (°C):</b>	No data available
<b>Specific Gravity:</b>	1.145
<b>Vapour Pressure:</b>	No data available
<b>Flammability Limits:</b>	
<b>Solubility:</b>	Soluble in water
<b>Flash point:</b>	> 100 °C
<b>Flammability limit in air:</b>	
<b>Upper Flammability Limit</b>	No data available
<b>Lower Flammability Limit</b>	No data available
<b>Explosivity:</b>	Not applicable

## SECTION 10 – STABILITY AND REACTIVITY

<b>Reactivity</b>	No data available
<b>Thermal decomposition</b>	No data available.
<b>Chemical stability</b>	Stable under normal conditions. Hazardous polymerisation does not occur.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Extremes of temperature and direct sunlight.
<b>Incompatible materials</b>	Strong acids, strong bases, strong oxidising agents. Ammonia may be evolved in the presence of alkalis.
<b>Hazardous decomposition products</b>	Ammonia. In a fire, oxides of carbon, nitrogen, phosphorus and sulphur may be emitted.

## SECTION 11 – TOXICOLOGICAL INFORMATION

### Acute Toxicity – Oral

LD<sub>50</sub> female rat: 1750 mg/kg (product)

### Acute Toxicity - Dermal

LD<sub>50</sub> female rat: >2000 mg/kg (product)

LD<sub>50</sub> male rat: >2000 mg/kg (product)

### Acute Toxicity – Inhalation

LC<sub>50</sub> female rat: >5.265 mg/L (4 hr) (product)

LC<sub>50</sub> male rat: >5.265 mg/L (4 hr) (product)

### Skin irritation

Slightly irritating (rabbit) (product)

### Eye irritation

Moderately irritating (rabbit) (product)

### Sensitisation

Non-sensitising (nice) (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.

### **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**

According to national and international transport regulations this material is not classified as dangerous goods / hazardous material.

## **SECTION 15 – REGULATORY INFORMATION**

<b>EPA Registration No.</b>	94442-1
<b>Packaging &amp; Labelling</b>	CAUTION KEEP OUT OF REACH OF CHILDREN PLEASE REFER TO LABEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND DIRECTIONS FOR USE.

## **SECTION 16 – OTHER INFORMATION**

**REFER TO THE PRODUCT LABEL FOR TERMS AND CONDITIONS OF USE.**