

## SAFETY DATA SHEET

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

<b>Product Name:</b>	<b>Kenso Agcare Texus Selective Herbicide</b>
<b>Product Type:</b>	Group F + I Herbicide
<b>Company Name:</b>	Kenso Corporation (M) Sdn Bhd
<b>Address:</b>	Level 1, 98 Commercial Road, Teneriffe, 4005 QLD.
<b>Telephone Number:</b>	(07) 3216 1188
<b>Emergency Telephone Number:</b>	000 (Police or Fire Brigade) <b>13 11 26 (Poisons Information Centre)</b>
<b>Use:</b>	For the control of certain broadleaf weeds in winter cereals and clover.

### SECTION 2 – HAZARDS IDENTIFICATION

**Statement of Hazardous Nature** 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 liquid – Category 4  
Acute toxicity (Oral) – Category 4  
Acute toxicity (Dermal) – Category 4  
Skin corrosion/ irritation – Category 2  
Serious eye damage/eye irritation – Category 2/2A  
Acute toxicity (Inhalation) – Category 4  
Specific target organ toxicity (Single exposure) – Category 3  
Hazardous to the aquatic environment, long term – Chronic 1

**GHS Signal Word:**  
**Hazard statements:**

**WARNING**

H227: Combustible liquid.  
H302: Harmful if swallowed.  
H312: Harmful in contact with skin.  
H315: Causes skin irritation.  
H319: Causes serious eye irritation.  
H332: Harmful if inhaled.  
H335: May cause respiratory irritation.  
H410: Very toxic to aquatic life with long lasting effects.  
**Prevention:** P210: Keep away from heat/sparks/open flames/hot surfaces and other ignition sources. No smoking.  
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.  
P264: Wash contacted area thoroughly after handling.  
P270: Do not eat, drink or smoke when using this product.  
P271: Use only outdoors or in a well-ventilated area.  
P273: Avoid release to the environment.

**Response:** P280: Wear protective gloves/protective clothing/eye protection/face protection.  
 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 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 or doctor/physician if you feel unwell.  
 P321: Specific treatment (see FIRST AID on this label).  
 P330: Rinse mouth.  
 P332+P313: If skin irritation occurs: Get medical advice/attention.  
 P337+P313: If eye irritation persists: Get medical advice/attention.  
 P362+P364: Take off contaminated clothing and wash 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.  
 P405: Store locked up.

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

**SUSMP Classification:** S5  
**ADG Classification:** N/A  
**UN Number:** N/A

### Emergency Overview

**Physical Description & colour:** Dark brown liquid.

**Odour:** Strong ester odour.

**Major Health Hazards:** Harmful if swallowed. Will damage the eyes. Will irritate the skin.

### SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
MCPA (present as the 2-ethyhexyl ester)	29450-45-1	25%
Diflufenican	83164-33-4	2.5%
Liquid Hydrocarbon	64742-94-5	32.9%
N-Methyl-2-pyrrolidone	90438-79-2	15%
Inert ingredients	secret	to 100%

### SECTION 4 – FIRST AID MEASURES

<b>Inhalation:</b>	Remove to fresh air, keep warm and at rest. Give artificial respiration or oxygen if breathing is shallow or stopped. Get medical attention immediately.
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<b>Skin contact:</b>	Remove contaminated clothing and wash affected areas or skin with soap and water. Seek medical advice if irritation develops.
<b>Eye contact:</b>	Hold the eyes and flush immediately with plenty of water. Seek medical advice if irritation develops.
<b>Ingestion:</b>	<p>If swallowed, do NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Information Centre on 13 11 26 (Australia). Make every effort to prevent vomit from entering the lungs by careful placement of the patient. Give a glass of water.</p> <p><b>Note: Where medical attention is not immediately available or where patient is more than 15 minutes from a hospital or unless instructed otherwise: induce vomiting with fingers down back of the throat, only if conscious.</b> Lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</p>

**Advice to Doctor:**

Treatment is symptomatic.

If vomiting occurs, solvent present may cause pulmonary pneumonitis.

**SECTION 5 – FIRE FIGHTING MEASURES**

**Specific Hazard**

Product is a combustible liquid, (C1)

**Fire/Explosion Hazard**

**Dangerous Decomposition or Combustion Products**

**Thermal Decomposition**

There is no risk of an explosion from this product under normal circumstances if it is involved in a fire. This product is likely to decompose only after heating to dryness, followed by further strong heating. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

**Dangerous decomposition or Combustion Products**

Hydrogen bromide, hydrogen cyanide, hydrogen fluoride, and oxides of nitrogen and carbon may be released in a fire.

**Hazardous decomposition products**

None known

**Hazardous reactions**

None known

**Extinguishing Media**

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

**SECTION 6 – ACCIDENTAL RELEASE MEASURES**

**Spills & Disposal**

Ensure suitable personal protection (including respiratory protection) during removal of spillage. Contain spill and absorb with sand or other absorbent material. Do not allow to enter drains, sewers and watercourses. Collect in sealed open top container for disposal. Triple rinse containers, add

rinsings to spray tanks and send containers for recycling or if not recycling, break, crush or puncture and bury empty containers in a local authority landfill or in accordance with local, state or federal regulation. Do not dispose of undiluted chemicals on site.

## 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

The NOHSC exposure standards for N-methyl-2-pyrrolidone are:

TWA 25 ppm(103 mg/m<sup>3</sup>); STEL 75 ppm (309 mg/m<sup>3</sup>); Skin notation

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 a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL.

Skin notation – Absorption through the skin may be a significant source of exposure.

### Engineering controls

Control process conditions to avoid contact. Use local exhaust ventilation during manufacturing operations. Use in a well-ventilated area only.

### Personal Protective Equipment

- Face-shield
- Cotton overalls buttoned to the neck and wrist and a washable hat
- Elbow-length PVC gloves

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Form:</b>	Liquid
<b>Colour:</b>	Dark brown liquid
<b>Odour:</b>	Strong ester odour
<b>Boiling Point (°C):</b>	176 - 200° C (hydrocarbon solvent)

<b>Vapour Pressure:</b>	Not available
<b>Specific Gravity:</b>	1.00 – 1.01
<b>Flashpoint:</b>	> 66° C – closed cup, which is the flash point of the hydrocarbon solvent
<b>Flammability:</b>	Combustible Liquid, (C1)
<b>Solubility:</b>	Emulsify in water

## SECTION 10 – STABILITY AND REACTIVITY

### Chemical stability

This material is stable under normal use and storage conditions.

### Conditions to avoid

Avoid sources of ignition and extremes of temperature.

### Incompatible Materials

Incompatible with strong acids and bases, oxidizing and reducing agents.

### Hazardous decomposition products

Hydrogen fluoride, hydrogen chloride, and oxides of carbon and nitrogen may be generated under extreme heat conditions or in a fire.

### Hazardous reactions

None

## SECTION 11 – TOXICOLOGICAL INFORMATION

### Acute Toxicity – Oral

LD<sub>50</sub> rat: 1580 mg/kg

### Acute Toxicity – Dermal

LD<sub>50</sub> rat: > 2040 mg/kg

### Acute Toxicity – Inhalation

Inhalation LC<sub>50</sub> rat: > 5.11 mg/L (4 h) (MCPA-2-ethyl hexyl ester)

Inhalation LC<sub>50</sub> rat: > 5.12 mg/L (4 h) (diflufenican)

### Skin Irritation

Slightly to moderately irritating (rabbit) (similar product)

### Eye Irritation

Slightly irritating (rabbit) (similar product)

### Sensitisation

Sensitising (guinea pig) (similar product)

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## Potential Health Effects

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### Acute:

**Inhalation:** Irritation to respiratory system

**Skin contact:** Will irritate the skin. Harmful in contact with skin, as this product can be absorbed through the skin. Repeated exposure to the solvent in this product may cause skin dryness or cracking.

**Eye contact:** Cause irritation

**Ingestion :** Harmful

**Chronic:**

In long term toxicity studies with MCPA (acid) at high doses, the target organs were the liver, kidneys and skin.

Diflufenican is not mutagenic, teratogenic or oncogenic. In animal studies, N-methyl-2-pyrrolidone showed a developmental toxic effect in high doses which were maternally toxic.

**SECTION 12 – ECOLOGICAL INFORMATION**

Dangerous to fish. Low hazard to bees and earthworms. Sprayed weeds may become more palatable to stock and a higher intake of some weeds may result in stock poisoning and death from causes such as nitrate poisoning.

DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

**Ecotoxicity**

MCPA-2-ethylhexyl:

Fish toxicity: LC<sub>50</sub> (96 h) rainbow trout 50-560 mg/L, bluegill sunfish > 150 mg/L

Bird toxicity: LC<sub>50</sub> (96 h) bobwhite quail 377 mg/kg

Daphnia toxicity: LC<sub>50</sub> (48 h) > 190 mg/L

Algae toxicity: EC<sub>50</sub> *Selenastrum capricornutum* > 392 mg/L

Diflufenican:

Fish toxicity: LC<sub>50</sub> (96 h) rainbow trout > 109 µg/L

Bird toxicity: LD<sub>50</sub> bobwhite quail > 2150 mg/kg

LD<sub>50</sub> mallard duck > 4000 mg/kg

Daphnia toxicity: LC<sub>50</sub> (48 h) *Daphnia magna* > 240 µg/L

Algae toxicity: EC<sub>50</sub> (96 h) > 10 mg/L

**Environmental fate, persistence and degradability, mobility**

**MCPA-ethylhexyl:** Hydrolyses rapidly in natural waters and soil water mixtures. DT<sub>50</sub> in soil < 7 days after initial lag phase (acid form).

**Diflufenican:** Not readily biodegradable. Bioconcentration factor (BCF): 1.596. DT<sub>50</sub> varies from 85.6 – 282 days depending on soil type and water content.

**N-methyl-2-pyrrolidone** is readily biodegradable.

**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 MCPA 2-ETHYL HEXYL ESTER and DIFLUFENICAN)

**Class:** 9  
**Packaging group:** III  
**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  
**Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains MCPA 2-ETHYL HEXYL ESTER and DIFLUFENICAN)  
**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 0428 776 327  
Ask for Russell Clark