# SAFETY DATA SHEET

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

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| **Product Name:** | **Kenso Agcare Token 240 Selective Herbicide** |
| **Product Type:** | Group 1 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)<br>**13 11 26 (Poisons Information Centre)** |
| **Use:** | For the control of Wild Oats, Paradoxa Grass (Annual Phalaris), Canary Grass and Annual Ryegrass in Wheat. Highly active on Wild Oats and can be mixed with many broadleaf herbicides. |

## 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:**
Flammable liquids – Category 4
Acute toxicity (Oral) – Category 4
Aspiration hazard – Category 1
Skin corrosion/irritation – Category 2
Skin sensitization – Category 1
Serious eye damage/eye irritation – Category 2/2A
Reproductive toxicity – Category 1
Specific target organ toxicity (Repeated exposure) – Category 2
Hazardous to the aquatic environment, long term – Chronic 1

**GHS Signal Word:** **DANGER**

**Hazard statements:**
H227: Combustible liquid.
H302: Harmful if swallowed.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H360: May damage fertility or the unborn child.
H373: May cause damage to organs through prolonged or repeated exposure.
H410: Very toxic to aquatic life with long lasting effects.

**Prevention:**
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.

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| | P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.<br>P260: Do not breathe dust/fume/gas/mist/vapours/spray.<br>P264: Wash contacted areas thoroughly after handling.<br>P270: Do not eat, drink or smoke when using this product.<br>P272: Contaminated work clothing should not be allowed out of the workplace.<br>P273: Avoid release to the environment.<br>P280: Wear protective gloves/protective clothing/eye protection/face protection. |
| **Response:** | P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/ doctor/physician.<br>P302+P352: IF ON SKIN: Wash with plenty of soap and water.<br>P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P308+P313: IF exposed or concerned: Get medical advice/attention.<br>P314: Get medical advice/attention if you feel unwell.<br>P321: Specific treatment (see FIRST AID on this label)<br>P330: Rinse mouth.<br>P331: Do NOT induce vomiting.<br>P333+P313: If skin irritation or rash occurs: Get medical advice/ attention.<br>P337+P313: If eye irritation persists: Get medical advice/attention.<br>P362+P364: Take off contaminated clothing and wash it before reuse.<br>P370+P378: In case of fire: Use water fog, foam, dry agent (carbon dioxide, dry chemical powder) to extinguish.<br>P391: Collect spillage. |
| **Storage:** | P403: Store in a well-ventilated place.<br>P405: Store locked up. |
| **Disposal:** | P501: Dispose of contents/container as specified on the registered label |
| **SUSMP Classification:** | S6 |
| **ADG Classification:** | N/A |
| **UN Number:** | N/A |

## Emergency Overview

**Physical Description & colour**: Brown liquid
**Odour:** Aromatic solvent odour
**Major Health Hazards:** No major health hazard is known.

## SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredients | CAS number | Proportion |
|---|---|---|
| Clodinafop-propargyl | 105512-06-9 | 24% |
| Cloquintocet-mexyl | 99607-70-2 | 6.0% |

| | | |
|---|---|---|
| Inert ingredients | secret | <15% |
| Liquid hydrocarbon | | to 100% |

## SECTION 4 – FIRST AID MEASURES

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| **Inhalation:** | Move affected person to fresh air and keep at rest until recovered. |
| **Skin contact:** | Remove contaminated clothing and wash affected areas thoroughly with soap and water. |
| **Eye contact:** | If product gets in eyes, wash it out immediately with water. Seek medical attention. |
| **Ingestion:** | If swallowed and if more than 15 minutes from a hospital, induce vomiting preferably using Ipecac Syrup (APF). |

**Advice to Doctor**
No specific antidote exists. Treat symptomatically.

## SECTION 5 – FIRE FIGHTING MEASURES

**Specific Hazard**
Product is a combustible liquid, (C1)
**Fire/Explosion Hazard**
**Dangerous Decomposition or Combustion Products**
**Thermal Decomposition**
This product is non-flammable and non-explosive. The product may burn if involved in a fire. Extinguish warehouse and factory fires using fine-water spray or foam. During a fire this product may release smoke and hazardous decomposition products. When fighting a major fire wear an air-supplied respirator. Do not allow fire-water to enter drains.
Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas. Oxides of sulfur (sulfur dioxide is a respiratory hazard) and other sulfur compounds.
**Thermal decomposition**
None
**Hazardous decomposition products**
Can decompose at high temperatures forming toxic gases.
**Extinguishing Media**
Use carbon dioxide, dry chemical, foam, water fog.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spills and Disposal**
In case of spillage it is important to take all steps necessary to:
• Avoid eye and skin contact.
• Avoid contamination of waterways
***Procedure for spill:***
(1) Keep all bystanders away.

(2) Wear goggles, half face-piece respirator with combined dust and vapour cartridge, full length clothing and PVC gloves.
(3) Reposition any leaking containers so as to minimise leakage.
(4) Dam and absorb spill with an absorbent material (eg. sand or soil).
(5) Shovel the absorbed spill into drums.
(6) Disposal of the absorbed material will depend upon the extent of the spill.
- For quantities up to 50L of product bury in a secure landfill site.
- For quantities greater than 50 L seek advice from the manufacturer (use emergency contact number below) before attempting disposal. Contain in a secure location until disposal method is established.

(7) Decontaminate spill area using hydrated lime.

***Dispose of empty, used containers by:***

(a) Triple rinsing or preferably pressure rinsing containers with water. Add the rinsings to the spray tank mix. DO NOT dispose of undiluted chemicals on site.
(b) If recycling, replace cap and return clean containers to recycler or designated collection point.
(c) If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

## 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 Standards:**

The manufacturer of the **aromatic hydrocarbon mixture** recommends an occupational exposure limit of 100 ppm total hydrocarbon. This level is unlikely to be reached under normal usage of this product. No other exposure standards have been set for the components of this product.

**Exposure Potential -** Swallowing is unlikely under normal conditions of usage. Skin uptake of **clodinafop-propargyl technical** and **cloquintocet-mexyl technical** can occur. Inhalation of spray mist is a possible route of exposure. This product is diluted with water prior to use as a spray. This diluted form is less toxic by all routes of exposure.

**Re-entry Period -** Do not enter treated areas without protective clothing until the spray has dried.

**Engineering Controls:**

No special requirements. Product is used outdoors.

**Personal Protection:**
Eyes: Wear goggles.
Clothing: Wear cotton overalls buttoned to the neck and wrist and a washable hat.
Gloves: Wear elbow-length butyl rubber gloves.
Respiratory: Wear face shield.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

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| **Form:** | Liquid |
| **Colour:** | Brown liquid |
| **Odour:** | Aromatic solvent odour |
| **Boiling Point (°C):** | Not applicable |
| **Vapour Pressure:** | Not applicable |
| **Specific gravity:** | 1.10 at 20ºC |
| **Flashpoint:** | > 70 ºC (closed cup) |
| **Flammability:** | Combustible Liquid, (C1) |
| **Solubility:** | Emulsify in water |

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability**
This product is stable under normal storage conditions.
**Conditions to Avoid**
Avoid extreme heat.
**Incompatibilities**
Avoid acids, alkalis, strong oxidising agents.
**Hazardous Polymerization**
Hazardous polymerization is not possible.

## SECTION 11 – TOXICOLOGICAL INFORMATION

**Clodinafop-propargyl technical** is practically non-toxic to birds, crustaceans, earthworms, soil microorganisms and bees, and highly toxic to fish [LC50 (96 h) = 0.4 mg/L for rainbow trout]. The formulated product is moderately toxic to fish and aquatic invertebrates [LC50 (96 h) = 4.9 mg/L for trout].
**Cloquintocet-mexyl technical** is practically non-toxic to birds, fish, crustaceans, earthworms, soil microorganisms and bees.

### Potential Health Effects

**Health Effects**

***Acute:***
**Toxicity** - This product is slightly hazardous (WHO Hazard Class III)
Inhalation: **LOW TOXICITY**

Tests on rats using a similar Token 240 EC formulation indicate low toxicity due to inhalation of the undiluted product.
(LC50 (4 h) > 3,500 mg/m3)

Skin contact: **LOW TOXICITY**
Tests on rats using an almost identical Token 240 EC formulation indicate low toxicity due to skin contact with the undiluted product.
(LD50 > 4,000 mg/kg)

Ingestion: **LOW TOXICITY**
Tests on rats using an almost identical Token 240 EC formulation indicate low toxicity following single oral doses of the undiluted product.
(LD50 > 2,276 mg/kg)

**Irritation -** (Based on studies with rabbits)
Eye: **MODERATE IRRITANT**
Skin: **MODERATE IRRITANT**

**Skin Sensitisation** - (Based on test with guinea pigs using an almost identical Token 240 EC formulation)
**POTENTIAL SKIN SENSITISER** (ie contact allergenic material)

***Chronic:***
**Clodinafop-propargyl technical** has been extensively tested on laboratory mammals and in test-tube systems. No evidence of mutagenic, teratogenic or reproductive effects was obtained. **Clodinafop-propargyl technical** induced liver toxicity and benign and malignant liver tumours in mice fed high daily doses over their lifetime. Rats fed high doses showed mild liver toxicity but did not develop tumours while no liver effects were observed for dogs fed high doses. The liver tumour finding occurring at high doses is believed due to **clodinafop-propargyl** inducing proliferative effects genetically pre-existing in mice and has no relevance to humans because the cellular changes which underlie it are rodent-specific and have been shown experimentally not to occur in primates.
**Cloquintocet-mexyl technical** has been extensively tested and no evidence of mutagenic, carcinogenic, teratogenic, or reproductive effects was obtained.
The **aromatic hydrocarbon mixture** may cause central nervous system depression and narcosis.
**Other information:**
The ADI for humans (Clodinafop-propargyl) is 0.004 mg/kg/bw/day. The corresponding NOAEL is set at 0.37 mg/kg/bw/day. The ADI for humans (Cloquintocet-mexyl) is 0.04 mg/kg/bw/day. The corresponding NOAEL is set at 4 mg/kg/bw/day.
**ADI= Acceptable Daily Intake; NOAEL: No Observable Adverse Effect Level. Data adopted from Australia ADI List, December 2023.*

## SECTION 12 – ECOLOGICAL INFORMATION

**Clodinafop-Propargyl:**
Bees LC50/EC50 > 100 µg/bee
Invertebrates (Water Flea) LC50/EC50 > 2.0 ppm
Fish (Trout) LC50/EC50 0.39 ppm Fish (Bluegill) LC50/EC50 0.21 ppm
Birds (8-day dietary - Bobwhite Quail) LC50/EC50 > 5,200 ppm

Birds (8-day dietary - Mallard Duck) LC50/EC50 > 5,200 ppm
**Clodinafop-Propargyl:** Liver, skin, bone marrow
Cloquintocet-Mexyl: Eye, skin, lung, digestive tract
**Petroleum Solvent:** Respiratory tract, stomach, liver, thyroid, urinary bladder, CNS, skin
**n-Methylpyrrolidone:** Eye, skin

**Clodinafop-Propargyl:**
Daphnia magna 21 days EC50 0.43 mg/l Rainbow Trout 21 days NOEC 0.12 mg/l

**Known Harmful Effects on the Environment**
**Other Precautions**
None
**Environ. Protection**
DO NOT contaminate streams, rivers or waterways with Token 240 Selective Herbicide or the used containers.
**Persistence / Degradability**
Not persistent in soil or water. Low to moderate mobility in soil. Sinks in water (after 24h).
This product is toxic to aquatic organisms. Insufficient data to be sure of status.
**Environmental Fate, persistence and degradability, mobility**
No data available for the formulation. The formulation presented here is for the active ingredient, clodinafop-propargyl. Low bioaccumulation potential.

## 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 CLODINAFOP-PROPARGYL, CLOQUINTOCET-MEXYL) |
| **Class:** | 9 |
| **Packaging group:** | III |
| **Hazchem:** | 3Z |
| **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**

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|---|---|
| **UN Number:** | 3082 |
| **Proper shipping name:** | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains CLODINAFOP-PROPARGYL, CLOQUINTOCET-MEXYL) |
| **Class:** | 9 |

**Packaging group:** III
**Marine pollutant:** Yes

## SECTION 15 – REGULATORY INFORMATION

**SUSMP Classification** S6
**Packaging & Labelling** POISON
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:**

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|---|---|---|
| Police and Fire Brigade: | Dial | 000 |
| **National Poisons Information Centre:** | **Dial** | **13 11 26 (from anywhere in Australia)** |
| For 24 hour emergency response: | Dial | 1800 951 288<br>03 9573 3188 |