

## SAFETY DATA SHEET

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

<b>Product Name:</b>	<b>Kenso Agcare Bromoxynil M Selective Herbicide</b>
<b>Product Type:</b>	Group C 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 control of broadleaf weeds in cereals, linseed and grass pastures 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:** Flammable liquids – Category 4  
Acute toxicity (Oral) – Category 4  
Aspiration hazard – Category 1  
Acute toxicity (Dermal) – Category 4  
Skin sensitization – Category 1  
Acute toxicity (Inhalation) – Category 3  
Reproductive toxicity – Category 2  
Hazardous to the aquatic environment, long-term – Chronic 1

**GHS Signal Word:** **WARNING**

**Hazard statements:**

H227: Combustible liquid.  
H302: Harmful if swallowed  
H304: May be fatal if swallowed and enters airways.  
H312: Harmful in contact with skin.  
H317: May cause an allergic skin reaction.  
H331: Toxic if inhaled.  
H361: Suspected of damaging fertility or the unborn child.  
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.  
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
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.  
 P272: Contaminated work clothing should not be allowed out of the workplace.  
 P273: Avoid release to the environment.  
 P280: Wear protective gloves/protective clothing/eye protection/face protection.  
 P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician.  
 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.  
 P311: Call a POISON CENTER/doctor/physician.  
 P312: Call a POISON CENTER or doctor/physician if you feel unwell.  
 P321: Specific treatment (see FIRST AID on this label)  
 P330: Rinse mouth.  
 P331: Do NOT induce vomiting.  
 P333+P313: If skin irritation or rash occurs: Get medical advice/attention.  
 P362+P364: Take off contaminated clothing and wash it 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.  
 P403: Store in a well-ventilated place.  
 P405: Store locked up.

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

**SUSMP Classification:** S6  
**ADG Classification:** N/A  
**UN Number:** N/A

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### Emergency Overview

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

**Odour:** Aromatic solvent odour.

### SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
Bromoxynil (present as n-octanoyl ester)	1689-99-5	20%
MCPA (present as 2-ethyhexyl ester)	29450-45-1	20%
Inert ingredients	secret	<15%
Liquid Hydrocarbon	64742-94-5	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.
<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>	If swallowed, and if more than 15 minutes from a hospital induce vomiting, preferably using Ipecac Syrup APF. Seek medical advice immediately.

**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**

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

**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**

**National Exposure Standards**

The manufacturer of the solvent recommends an Occupational Exposure Limit for solvent naphtha (petroleum), heavy aromatic: TWA: 100 mg/m<sup>3</sup> (17 ppm).

For the small amount of naphthalene present in the solvent the NOHSC Occupational Exposure Limits are: TWA: 10 ppm (52 mg/m<sup>3</sup>), STEL: 15 ppm (79 mg/m<sup>3</sup>). Skin notation.

**Engineering Controls**

Handle in well ventilated areas, generally natural ventilation is adequate.

**Personal Protective Equipment**

When preparing and using the product wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield.

**Hygiene Measures** After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash contaminated clothing and safety equipment.

**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

<b>Form:</b>	Liquid
<b>Colour:</b>	Dark brown liquid
<b>Odour:</b>	Aromatic solvent odour
<b>Boiling Point (°C):</b>	190 - 270°C (for solvent)
<b>Vapour Pressure:</b>	0.19 mPa @ 25°C Bromoxynil octanoate: 0.48 mPa @ 20°C MCPA 2EHE.
<b>Specific Gravity:</b>	1.07-1.09
<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**

No information available.

**Incompatible Materials**

No information available.

**Hazardous decomposition products**

Hydrogen bromide, hydrogen chloride, hydrogen cyanide and possibly other compounds of bromine, chlorine and nitrogen.

### Hazardous reactions

Avoid chlorates, nitrates, nitric acid, organic peroxides and potassium chlorate.

## SECTION 11 – TOXICOLOGICAL INFORMATION

### Acute Toxicity – Oral

LD<sub>50</sub> (rat) 238 mg/kg for bromoxynil octanoate

LD<sub>50</sub> (rat) 1300 mg/kg for MCPA 2EHE

### Acute Toxicity –Dermal

LD<sub>50</sub> (rat) >2000 mg/kg for bromoxynil octanoate

LD<sub>50</sub> (rat) >2000 mg/kg for MCPA 2EHE

### Acute Toxicity -Inhalation

LC<sub>50</sub> (rat) (4hr) 0.72 mg/l for bromoxynil octanoate

LC<sub>50</sub> (rat) (4hr) >3.1 mg/l for MCPA 2EHE

### Eye Irritation

The product is an eye irritant.

### Skin Irritation

Mild to moderate skin irritant.

### Skin Sensitisation

This product is a skin sensitiser.

## Potential Health Effects

### Acute:

**Inhalation:** Irritation to respiratory system

**Skin contact:** Cause irritation

**Eye contact:** Cause irritation

**Ingestion:** Poisonous if swallowed

**Chronic:** Bromoxynil is classified by NOHSC as a Category 3 teratogen – substances which cause concern for man owing to possible teratogenic effects but in respect of which the information is not adequate for making a satisfactory assessment. In long term toxicity studies with MCPA (acid) at high doses, the target organs were the liver, kidneys and skin. This product contains naphthalene. The International Agency for Research on Cancer evaluated naphthalene and concluded that there was sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans. Accordingly, IARC classified naphthalene as a possible human carcinogen. (Group 2B).

### Other Information

The Australian Acceptable Daily Intake (ADI) for bromoxynil for a human is 0.003 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 0.3 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. ADI for MCPA is 0.01 mg/kg/day, NOAEL 1.1 mg/kg/day.

\*ADI= Acceptable Daily Intake; NOAEL: No Observable Adverse Effect Level. Data adopted from Australia ADI List, December 2023.

## SECTION 12 – ECOLOGICAL INFORMATION

### Known Harmful Effects on the Environment

Harmful to fish and other aquatic organisms.

### Environ. Protection

Marine pollutant.

Spray drift can cause damage, read the label for more information.

### Acute Toxicity – Fish

The following is data for the active ingredient, bromoxynil octanoate.

Toxic to fish.

LC<sub>50</sub> (96hr) for rainbow trout is 0.041 mg/l for bromoxynil octanoate

LC<sub>50</sub> (96hr) for rainbow trout is 1.15 mg/l for MCPA 2EHE

### Acute Toxicity – Daphnia

LC<sub>50</sub> (48hr) for daphnia is 0.046 mg/l for bromoxynil octanoate.

LC<sub>50</sub> (48 h) > 190 mg/L for MCPA 2EHE

### Acute Toxicity – Other Organisms

Bees: Not toxic to bees. LD<sub>50</sub> >100 µg/bee.

### Persistence /Degradability

Average soil half life of bromoxynil is 7 days.

Hydrolyses rapidly in natural waters and soil water mixtures. DT50 in soil < 7 days after initial lag phase (acid form).

**Other Precautions** Do not spray in high winds.

Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.

## 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

<b>UN Number:</b>	3082
<b>Proper shipping name:</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (contains BROMOXYNIL OCTANOATE and MCPA ESTER)
<b>Class:</b>	9
<b>Packaging group:</b>	III
<b>Hazchem:</b>	3Z
<b>Storage and Transport:</b>	Considered non dangerous for road and rail transport (in

packaging) by the Australian Code for 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 BROMOXYNIL OCTANOATE and MCPA ESTER)  
**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:**

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