

## MATERIAL SAFETY DATA SHEET

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

**Product Name:** Kenso Agcare Metoken 720 Herbicide  
**Product Type:** Group K 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 the control of certain annual grasses and broadleaf weeds in certain crops.

### SECTION 2 – HAZARDS IDENTIFICATION

**Classified as hazardous according to criteria of NOHSC**

**Risk Phrases:** R43 May cause sensitization by skin contact.  
**Safety Phrases:** S28 After contact with skin, wash immediately with plenty of soap and water.  
**SUSDP Classification:** S5  
**ADG Classification:** None allocated. Not a Dangerous Good.  
**UN Number:** None allocated

#### Emergency Overview

**Physical Description & colour:** Light to dark brown liquid.

**Odour:** aromatic odour.

**Major Health Hazards:** Signs of human intoxication from Metolachlor exposure include abdominal cramps, anemia, shortness of breath, dark urine, convulsions, diarrhea, jaundice, weakness, nausea, sweating, and dizziness. Possible skin sensitiser.

#### Potential Health Effects

##### Health Effects

##### Acute:

**Swallowed:** Practically non-toxic.  
**Eye:** Non-irritant  
**Skin:** Non-irritant  
**Inhaled:** Low toxicity.

##### Chronic:

Chronic toxicity and/or oncogenicity studies were conducted on metolachlor in rats, mice and dogs. Metolachlor technical has been extensively tested on laboratory mammals and in test tube systems. No evidence of mutagenic, teratogenic or reproductive effect was obtained. In two separate studies in mice, metolachlor technical did not induce tumors or other long-term toxic effects. No adverse effects were observed in two long-term studies in rats, except at very high doses, where a small number of females developed benign liver tumors. The observed oncogenic response reflects the metabolic overloading of the liver at the highest dose level administered which resulted in cytotoxicity.

### SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
Metolachlor	51218-45-2	72 % w/v
Emulsifier	secret	>10% w/v
Liquid hydrocarbon	64742-94-5	To 100 % w/v

### SECTION 4 – FIRST AID MEASURES

<b>Swallowed</b>	If swallowed, and if more than 15 minutes from a hospital do not induce vomiting, Seek medical advice or contact Poisons Information Centre (Ph 13 11 26)
<b>Eye</b>	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open.
<b>Skin</b>	Remove contaminated clothing and launder before use. Wash affected areas or skin thoroughly with soap and water. Seek medical advice if irritation develops.
<b>Inhaled</b>	Remove to fresh air, keep warm and at rest until recovered.

**Advice to Doctor:**  
Treat symptomatically.

### SECTION 5 – FIRE FIGHTING MEASURES

**Fire/Explosion Hazard**  
**Dangerous decomposition or Combustion Products**  
**Thermal decomposition**  
Combustible liquid.

**Extinguishing Media**  
Extinguish fire with foam, dry powder, carbon dioxide.

### SECTION 6 – ACCIDENTAL RELEASE MEASURES

#### Spills and 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

#### Storage

Do not use or store near heat or naked flames. Store in the closed, original container in a well-ventilated area away from children, animals, food, feedstuffs, seed and fertilizers. Do not store for prolonged periods in direct sunlight.

This product is classified as a **C1 (Combustible Liquid)** for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to state regulations for storage and transport requirements.

**Transport**

Not considered hazardous by Australian Code for the Transport of Dangerous Goods by Road and Rail.

**SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION**

**Exposure Standards:**

None established for formulated product

Ingredient	TLV ppm
Solvent	100

**Engineering Controls:**

Well ventilated

**Personal Protection:**

Avoid contact with eyes and skin. Do not inhale spray mist. When preparing spray solution, wear PVC/rubber apron or cotton overalls buttoned to the neck and wrist, elbow-length PVC gloves and goggles or face-shield. After use and before eating, drinking and smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, face and contaminated clothing.

**Flammability:**

Combustible liquid C1

**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

<b>Form:</b>	liquid
<b>Colour:</b>	light to dark brown
<b>Odour:</b>	aromatic odour
<b>Boiling point (°C):</b>	Not available
<b>Vapour Pressure:</b>	18 mmHg @ 38 °C
<b>Flashpoint:</b>	Not available
<b>Flammability Limit:</b>	Not available
<b>Specific Density:</b>	1.045 ± 0.01
<b>Water Solubility</b>	Forms emulsion

**SECTION 10 – STABILITY AND REACTIVITY**

**Hazardous Polymerization**

Hazardous polymerisation is not possible.

**Materials to Avoid**

Corrosive to mild steel, galvanised steel and zinc. Non corrosive to stainless steel, polyethylene and plastics. Do not mix, store or apply the product or spray solutions of the product in galvanised steel or unlined steel (except stainless steel) containers or spray tanks.

**Hazardous Reaction**

Avoid contact of the concentrate with strong alkalis and alkaline materials such as lime. Such contact may release isopropylamine vapour with a strong fish like odour, which is an irritant to eyes. Isopropylamine is moderately toxic, LD50 (oral, rat) is 820 mg/kg and a TLV of 5 ppm (TWA) has been set.

## SECTION 11 – TOXICOLOGICAL INFORMATION

### Toxicity Data:

Product  
Acute oral LD<sub>50</sub> for rat: 2000 mg/kg  
Acute dermal LD<sub>50</sub> for rat: 5000 mg/kg

Technical  
Non-toxic to birds  
Slightly toxic to fish LC<sub>50</sub> (96hr) for bluegill: 3.16 mg/L  
Slightly toxic to bees

## SECTION 12 – ECOLOGICAL INFORMATION

### Acute Toxicity – Fish

The following is data for the active ingredient, metolachlor.  
Not toxic to fish. LC<sub>50</sub> (96 hr) for rainbow trout is 3.9 mg/l.

### Acute Toxicity – Daphnia

LC<sub>50</sub> (48hr) for daphnia is 25 mg/l.

### Acute Toxicity – Algae

EC<sub>50</sub> for *Scenedesmus subspicatus* is 0.1 mg/l.

### Acute Toxicity – Other Organisms

Birds: Not toxic to birds. LD<sub>50</sub> for mallard duck and bobwhite quail is >2150 mg/kg  
Bees: Not toxic to bees. LD<sub>50</sub> (oral and contact) is >110 µg/bee.

## 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

<b>U.N. Number</b>	None Allocated
<b>DG Class</b>	None Allocated
<b>Hazchem Code</b>	None Allocated
<b>Packing Group</b>	None Allocated
<b>Storage and Transport</b>	Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.

## SECTION 15 – REGULATORY INFORMATION

<b>Poisons Schedule</b>	S5
<b>Packaging &amp; Labelling</b>	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
<b>Hazard Category</b>	Harmful, Irritant
<b>AICS (Australia)</b>	All of the components in this product are listed on the Australian Inventory of Chemical Substances.

**SECTION 16 – OTHER INFORMATION**

**This MSDS contains only safety-related information. For other data see product literature.**

**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 0439 933 556

Ask for Murray Goodlich