

## MATERIAL SAFETY DATA SHEET

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

**Product Name:** Kenso Agcare Thidiazuron 500 SC Cotton Defoliant  
**Product Type:** Cotton Defoliant  
**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 defoliation of cotton prior to harvest.

### SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
Thidiazuron	51707-55-2	50 % w/v
Inert ingredient	secret	To 100 % w/v

### SECTION 3 – HAZARDS IDENTIFICATION

**Hazard Classification:** Not classified as hazardous according to criteria of ASCC Australia.  
**Risk Phrase(s):** Not Hazardous – No criteria found.  
**Safety Phrase(s):** Not Hazardous – No criteria found.  
**SUSDP Classification:** None allocated  
**ADG Classification:** None allocated. Not a dangerous good.  
**UN Number:** None allocated.

### Emergency Overview

**Physical Description & colour:** Beige coloured liquid.  
**Odour:** No odour.  
**Major Health Hazards:** No major health hazards are known.

### Potential Health Effects

#### Health Effects

##### Acute:

**Swallowed:** This product is unlikely to cause any irritation problems in the short or long term. No data for health effects associated with long term ingestion.

**Eye:** Available data shows that this product is not harmful. However product may be irritating to eyes, but is unlikely to cause anything more than mild transient discomfort. No data for health effects associated with long term eye exposure.

**Skin:** Available data indicates that this product is not harmful. It should present no hazards in normal use. However product may be mildly irritating, but is unlikely to cause anything more than mild transient discomfort. No data for health effects associated with long term skin exposure.

**Inhaled:** Available data indicates that this product is not harmful. In addition product is unlikely to cause any discomfort or irritation. No data for health effects associated with long term inhalation.

**Carcinogen Status:**

ASCC: No significant ingredient is classified as carcinogenic by ASCC

NTP: No significant ingredient is classified as carcinogenic by NTP.

IARC: No significant ingredient is classified as carcinogenic by IARC.

#### SECTION 4 – FIRST AID MEASURES

<b>Swallowed:</b>	First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor
<b>Skin:</b>	Irritation is unlikely. However, if irritation does occur, flush with lukewarm, gently flowing water for 5 minutes or until chemical is removed. If in doubt obtain medical advice.
<b>Eyes:</b>	No effects expected. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes.
<b>Inhaled:</b>	First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor

**Advice to Doctor:**

Treat symptomatically.

#### SECTION 5 – FIRE FIGHTING MEASURES

**Fire and Explosion Hazards:**

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.

**Extinguishing Media:**

Not Combustible. Use extinguishing media suited to burning materials.

**Fire Fighting:**

When fighting fires involving significant quantities of this product, wear a splash suit complete with self contained breathing apparatus.

**Flash point:**

Will not burn until water component is driven off.

**Upper Flammability Limit:** Does not burn.

**Lower Flammability Limit:** Does not burn.

**Autoignition temperature:** Does not burn.

**Flammability Class:** Does not burn.

#### SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spills and Disposal**

Contain spill and pick up solids preferably using a vacuum cleaner. Collect spilled material and waste in sealable open-top type containers for disposal. Prevent spillage from entering drains, streams or watercourses. If contamination is unavoidable contact the local water authority. Single rinse the container before disposal. Add rinsate to the spray tanks. Do not dispose of undiluted chemicals on site. Puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500mm

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:

Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

### Storage:

Make sure that containers of this product are kept tightly closed. Make sure that the product does not come into contact with substances listed under "Materials to avoid" in Section 10. Some liquid preparations settle or separate on standing and may require stirring before use. Check packaging - there may be further storage instructions on the label.

## SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Exposure Limits

Exposure limits have not been established by ASCC for any of the significant ingredients in this product. The ADI for Thidiazuron is set at 0.02mg/kg/day. The corresponding NOEL is set at 2.5mg/kg/day. ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. Values taken from Australian ADI List, Dec 2002.

### Engineering Control

No specific engineering controls. If dusts are generated, use local ventilation to control dust.

### Personal Protective Measures

The concentrate may irritate the eyes and may irritate the skin. Avoid contact with eyes and skin. When preparing product for use wear elbow length PVC gloves and face shield or goggles. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use wash gloves, face shield or goggles and contaminated clothing.

### 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>	Beige coloured
<b>Odour:</b>	No odour
<b>Boiling point (°C):</b>	Approximately 100°C at 100kPa
<b>Melting point (°C):</b>	No specific data. Liquid at normal temperatures
<b>Vapour Pressure:</b>	2.37 kPa at 20°C (water vapour pressure)
<b>Specific Density:</b>	1.15 ± 0.01
<b>Flashpoint:</b>	Not flammable.
<b>Autoignition Temperature:</b>	Does not burn.
<b>Solubility in Water:</b>	Completely soluble in water.

## SECTION 10 – STABILITY AND REACTIVITY

**Reactivity:** This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

**Conditions to Avoid:** This product should be kept in a cool place, preferably below 30°C.

**Incompatibilities:** strong acids, strong bases, strong oxidising agents.

**Fire Decomposition:** This product is likely to decompose only after heating to dryness, followed by further strong heating. 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. Most will have a foul odour. Water. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death. Hydrogen cyanide poisoning signs and symptoms are weakness, dizziness, headache, nausea, vomiting, coma, convulsions, and death. Death results from respiratory arrest. Hydrogen cyanide gas acts very rapidly; symptoms and death can both occur quickly.

**Polymerisation:** This product is unlikely to undergo polymerisation processes.

## SECTION 11 – TOXICOLOGICAL INFORMATION

### Toxicity Data:

Thidiazuron

Acute oral LD<sub>50</sub> for rats: > 4000 mg/kg

Acute oral LD<sub>50</sub> for mice: > 5000 mg/kg

Acute dermal LD<sub>50</sub> for rats: > 1000 mg/kg

Acute dermal LD<sub>50</sub> for rabbits: > 4000 mg/kg

Acute inhalation LC<sub>50</sub> (4hr) for rats: 2.3 mg/L

## SECTION 12 – ECOLOGICAL INFORMATION

### Acute Toxicity – Birds

LD<sub>50</sub> for (mallard duck) is 5000 mg/kg

LD<sub>50</sub> for Japanese quail is 3160 mg/kg

LD<sub>50</sub> for Bobwhite quail is 5000 mg/kg

### Acute Toxicity - Fish

LC<sub>50</sub> for Cat fish is 1000 mg/L

LC<sub>50</sub> for rainbow trout is 1000 mg/L

LC<sub>50</sub> for bluegill sunfish is 1000 mg/L

### Acute Toxicity – Other Organisms

EC<sub>50</sub> for worms 1400 mg/kg

EC<sub>50</sub> for daphnia 10 mg/L

## 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. Special help is available for the disposal of Agricultural Chemicals. The product label will give general advice regarding disposal of small quantities, and how to cleanse containers. However, for help with the collection of unwanted rural chemicals, contact ChemClear 1800 008 182 <http://www.chemclear.com.au/> and for help with the disposal of empty drums, contact DrumMuster <http://www.drummuster.com.au/> where you will find contact details for your area.

## SECTION 14 – TRANSPORT INFORMATION

**ADG Code:** This product is not classified as a Dangerous Good. No special transport conditions are necessary unless required by other regulations.

**SECTION 15 – REGULATORY INFORMATION**

**AICS:** All of the significant ingredients in this formulation are to be found in the public AICS Database

**SECTION 16 – OTHER INFORMATION**

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

**Acronyms:**

<b>ADG Code</b>	Australian Code for the Transport of Dangerous Goods by Road and Rail
<b>AICS</b>	Australian Inventory of Chemical Substances
<b>CAS number</b>	Chemical Abstracts Service Registry Number
<b>Hazchem Number</b>	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
<b>IARC</b>	International Agency for Research on Cancer
<b>NOHSC</b>	National Occupational Health and Safety Commission
<b>SUSDP</b>	Standard for the Uniform Scheduling of Drugs & Poisons
<b>UN Number</b>	United Nations Number

**CONTACT POINT:**

Police and Fire Brigade:	Dial	000
<b>National Poisons Information Centre:</b>	<b>Dial</b>	<b>13 11 26 (from anywhere in Australia)</b>
For 24 hour emergency response:	Dial	0439 933 556
		Ask for Murray Goodlich