MATERIAL SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name:	**Kenso Agcare Dicamba 700 Selective Herbicide**
Product Type:	Group I 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 broadleaf weeds in winter cereals, pastures, conservation tillage, sugar cane, turf, rice and non-crop areas as specified in the directions for use table on the label.

SECTION 2 – HAZARDS IDENTIFICATION

Classified as hazardous according to criteria of NOHSC.

Risk Phrases:	R36 Irritating to eyes.
Safety Phrases:	S2 Keep out of reach of children. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
SUSDP Classification:	S6
ADG Classification:	None allocated. Not a Dangerous Good.
UN Number:	None allocated

Emergency Overview

Physical Description & colour: Clear, amber liquid.
Odour: Mild amine odour.

Potential Health Effects

Health Effects

Acute:

Swallowed: The concentrate is of low toxicity if swallowed.

Eye: May cause irritation. Prolonged contact with the concentrate may cause damage to the eyes.

Skin: May irritate the skin. Prolonged contact with the concentrate can cause defatting of the skin and may result in dermatitis.

Inhaled: Not a likely route of exposure when handling the concentrate. When applying the product as a spray avoid breathing in spray mists.

Chronic:
Myotoxic muscular spasms, urinary incontinence and if excessive, dyspnea, cyanosis and exhaustion.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
Dicamba (present as dimethylamine salt)	1918-00-9	70% w/v
Water		To 100 % w/v

SECTION 4 – FIRST AID MEASURES

Swallowed	If swallowed, DO NOT induce vomiting. Seek medical advice or contact Poisons Information Centre (Ph 13 11 26). Make every effort to prevent vomit from entering the lungs by careful placement of the patient.
Eye	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open.
Skin	Remove contaminated clothing and launder before use. Wash affected areas or skin thoroughly with soap and water. Seek medical advice if irritation develops.
Inhaled	Remove to fresh air until recovered. If symptoms persist, seek medical advice.

Advice to Doctor:
Treat symptomatically.

SECTION 5 – FIRE FIGHTING MEASURES

Hazards from Combustion Products
Non-combustible. If involved in a fire, it will emit hydrogen chloride and possibly organochlorine compounds.

Extinguishing Media
Water fog, foam, carbon dioxide or dry chemical.

Emergency Action in case of Fire
If exposed to fire, keep container cool by spraying with water fog.

Protective Equipment
Breathable air apparatus may have to be worn if material is involved in fires especially in confined spaces.

Other Information
Prevent fire water from entering drains or water bodies.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spills & Disposal
Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite). Collect spilled material and waste in sealable open-top type containers for disposal. Dispose of at a landfill in accordance with local regulations.

Clean-up Methods – Large Spillages
Place damaged containers in recovery bins (if available) and return to manufacturer.

SECTION 7 – HANDLING AND STORAGE

Storage
Store in the closed, original container in a dry, cool well ventilated area out of direct sunlight. Keep container tightly sealed and do not store with seed, fertilisers or foodstuffs.

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 Limits
No biological exposure limit allocated. No exposure standard has been established for this product.

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

Personal Protective Equipment
When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield or goggles.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form:	liquid
Colour:	amber
Odour:	mild amine odour
Vapour Pressure:	Dicamba salt is not volatile
Boiling Point:	100 ^{0}C
Flammability Limit:	Non combustible
Specific Density:	1.19 $\pm$ 0.01
Water Solubility	Soluble in water

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability
Stable under normal conditions.

Hazardous Reaction
Keep away from strong oxidising agents.

Hazardous Polymerization
Hazardous polymerisation is not possible.

Materials to Avoid
Reaction of the concentrate or spray mix with acids will precipitate solid dicamba and largely de-activate the product and cause blockages in spray equipment. The addition of a strong alkali such as caustic soda will cause release of dimethylamine vapour. Dimethylamine is moderately toxic, LD50 (oral, rat) is 700 mg/kg and a TLV of 2 ppm (TWA) has been set.

SECTION 11 – TOXICOLOGICAL INFORMATION

Toxicology Information
No harmful effects are expected if the precautions on the label and this MSDS are followed.

Acute Toxicity – Oral LD_{50} (rat) 1707 mg/kg for dicamba

Acute Toxicity – Dermal LD_{50} (rabbit) >2000 mg/kg for dicamba

Acute Toxicity – Inhalation LC_{50} (rat) (4hr) >9.6 mg/l for dicamba

Other Information
The Australian Acceptable Daily Intake (ADI) for dicamba for a human is 0.03 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 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. (Ref: Comm. Dept. of Health and Ageing, 'ADI List', TGA, June 2004).

SECTION 12 – ECOLOGICAL INFORMATION

Acute Toxicity – Fish
The following is data for the active ingredient, dicamba.
LC_{50} (96 hr) for rainbow trout and bluegill sunfish is 135 mg/l.

Acute Toxicity – Daphnia
LC50 (48 hr) for daphnia is 110 mg/l for dicamba.

Acute Toxicity – Other Organisms
Bees: Not toxic to bees. LD_{50} >100 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

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

SECTION 15 – REGULATORY INFORMATION

Poisons Schedule	S6
Packaging & Labelling	POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Hazard Category	Irritant
AICS (Australia)	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