SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name:	**Kenso Agcare Ken-Amine 720 Selective Herbicide**
Product Type:	Group I 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) **13 11 26 (Poisons Information Centre)**
Use:	For the control of broadleaf weeds in fallow before direct drilling or sowing of cereals and pastures; and in cereal crops, pastures, sugar cane, peanuts and non-agricultural areas as per the Directions for Use.

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:	Acute toxicity (Oral) – Category 4 Skin sensitization – Category 1 Serious eye damage/eye irritation – Category 1 Hazardous to the aquatic environment, long term – Chronic 2
GHS Signal Word:	**WARNING**
Hazard statements:	H302: Harmful if swallowed. H317: May cause an allergic skin reaction. H318: Causes serious eye damage. H335: May cause respiratory irritation. H411: Toxic to aquatic life with long lasting effects.
Prevention:	P261: Avoid breathing dust/fume/gas/mist/vapours/spray. P264: Wash contacted areas thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P271: Use only in 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 and eye or face protection.
Response:	P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. 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. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310: Immediately call a POISON CENTER or doctor/physician. P312: Call a POISON CENTRE or doctor/physician if you feel unwell. P321: Specific treatment (see FIRST AID on this label). P330: Rinse mouth. P333+P313: If skin irritation or rash occurs: Get medical advice/ attention. P362+P364: Take off contaminated clothing and wash it before reuse. P391: Collect spillage
Storage:	P403+P233: Store in a well-ventilated place. Keep container tightly closed. P405: Store locked up.
Disposal:	P501: Dispose of contents/container as specified on the registered label
SUSMP Classification:	S6
ADG Classification:	Not a dangerous good.
UN Number:	None allocated.

Emergency Overview

Physical Description & colour: Clear reddish brown liquid.
Odour: Ammoniacal odour.
Major Health Hazards: The oral LD_{50} of 2,4-D ranges from 375 to 666 mg/kg in the rat, 370 mg/kg in mice, and from less than 320 to 1000 mg/kg in guinea pigs. The dermal LD_{50} values are 1500 mg/kg in rats and 1400 mg/kg in rabbits, respectively. In humans, prolonged breathing of 2,4-D causes coughing, burning, dizziness, and temporary loss of muscle coordination. Other symptoms of poisoning can be fatigue and weakness with possible nausea. On rare occasions following high levels of exposure, there can be inflammation of the nerve endings with muscular effects.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
2,4-D (present as dimethylamine salt)	2008-39-1	72%
Inert ingredients	secret	To 100%

SECTION 4 – FIRST AID MEASURES

Inhalation:	Remove to fresh air, keep warm and at rest. Give artificial respiration or oxygen if breathing is shallow or stopped. Get medical attention immediately.
Skin contact:	Remove contaminated clothing and wash affected areas or skin with soap and

	water. Seek medical advice if irritation develops.
Eye contact:	Hold the eyes and flush immediately with plenty of water. Seek medical advice if irritation develops.
Ingestion:	If swallowed, do NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Information Centre on 13 11 26 (Australia). Make every effort to prevent vomit from entering the lungs by careful placement of the patient. Give a glass of water. **Note: Where medical attention is not immediately available or where patient is more than 15 minutes from a hospital or unless instructed otherwise: induce vomiting with fingers down back of the throat, only if conscious.** Lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

Advice to Doctor:
Treatment is symptomatic.

SECTION 5 – FIRE FIGHTING MEASURES

Fire/Explosion Hazard
Dangerous Decomposition or Combustion Products
Thermal Decomposition
Not a fire or explosion hazard
Hazardous Decomposition Products
None known
Hazardous Reactions
None known
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.
Personal Protection
For appropriate personal protective equipment (PPE), refer Section 8.

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:
None established for formulated product

Ingredient	TWA mg/m^3
2,4-D Acid	10

Engineering Controls:
Ensure area is 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.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Colour:	Clear amber to brown liquid
Odour:	Ammoniacal odour
Boiling Point (°C):	Not available
Vapour Pressure:	Not available
Specific Density:	1.23 $\pm$ 0.01
Flashpoint:	Non flammable
Solubility:	Completely soluble

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

Reaction of the concentrate or spray mix with acids will precipitate solid 2,4-D acid 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, LD_{50} (oral, rat) is 700 mg/kg and a TLV of 10 ppm (TWA) has been set.

Hazardous Reactions

Keep away from strong oxidising agents.

Hazardous Polymerization

Hazardous polymerization is not possible.

SECTION 11 – TOXICOLOGICAL INFORMATION

Toxicology data (on 2,4-D acid)

Acute Toxicity – Oral

LD_{50} (oral, rat) 699 mg/kg

Acute Toxicity – Dermal

LD_{50} (dermal, rabbit) >2,000 mg/kg

Acute Toxicity – Inhalation

LC_{50} (inhalation, rat) >1.79 mg/L (4hr)

Toxicology data (on amines)

For Dimethylamine: LD_{50} (oral, rat) 700 mg/kg

For Diethanolamine: LD_{50} (oral, rat) 710 mg/kg

Potential Health Effects

Health Effects

Acute:

Inhalation:	Irritation to respiratory system
Skin contact:	Cause irritation
Eye contact:	Cause irritation
Ingestion:	Harmful

Chronic:

Not available.

Other information:

The Australian ADI for 2,4-D is set at 0.05 mg/kg/day, with corresponding NOEL at 5 mg/kg/day. **ADI= Acceptable Daily Intake; NOAEL: No Observable Adverse Effect Level. Data adopted from Australia ADI List, June 2023.* In trials using 2,4-D as a drug, studies on volunteers have shown that doses of between 5 and 36 mg/kg body weight do not cause any acute toxic effects. Formulated 2,4-D products can be absorbed by ingestion, inhalation (spray mist) and through the skin. Studies of users (sprayers) has shown that absorption through the skin is the most common route. When used with good agricultural spraying practice and good personal hygiene, absorption of 2,4-D is very low.

SECTION 12 – ECOLOGICAL INFORMATION

Known Harmful Effects on the Environment
2,4-D amine products do not appear to pose any threat to birds.
2,4-D amine products do not appear to pose any threat to fish or other aquatic organisms other than in very high concentrations.
Environ. Protection
Spray drift can cause damage, read the label for more information.
Acute Toxicity – Fish
Not toxic to fish.
LC_{50} (96 hr) for (rainbow trout) is ~100 mg/l.
Acute Toxicity – Daphnia
LC_{50} (48hr) for 2,4-D amines is 184 mg/l.
Acute Toxicity – Other Organisms
Birds: Not toxic to birds. LD_{50} for (mallard ducks) is >1000 mg/kg
Bees: Not toxic to bees. LD_{50} 104.5 µg/bee.
Sewage Treatment
Not inhibitory in sewage system, 2,4-D is rapidly biodegraded.

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:	None allocated
Proper shipping name:	None allocated
Class:	None allocated
Packaging group:	None allocated
Hazchem:	None allocated

IMO-IMDG

UN Number:	None allocated
Proper shipping name:	None allocated
Class:	None allocated
Packaging group:	None allocated
Marine pollutant:	None allocated

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