MATERIAL SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name:	**Kenso Agcare Bucko 242 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 climbing buckwheat, common sowthistle, skeleton weed, capeweed, doublegee and other broadleaf weeds in winter cereals and linseed crops.

SECTION 2 – HAZARDS IDENTIFICATION

Hazard Classification: Hazardous according to criteria of NOHSC Australia.
Risk Phrase(s): R41 Risk of serious damage to eyes
R22 Harmful if swallowed
Safety Phrase(s): S24/25 Avoid contact with skin and eyes.
S20/21 When using do not eat, drink or smoke
S37/39 Wear suitable gloves and eye/face protection
SUSDP Classification: S5
ADG Classification: None allocated. Not a dangerous good.
UN Number: None allocated.

Emergency Overview

Physical Description & colour: brown to black liquid.
Odour: mild.
Major Health Hazards: No major health hazard is known.

Potential Health Effects

Health Effects

Acute:

Swallowed: Low toxicity if swallowed. Small amounts swallowed incidentally as a result of mormal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Swallowing may result in gastrointestinal irritation or ulceration.

Eye: May cause severe irritation with corneal injury which may result in permanent impairment of vision. Chemical burns may occur.

Skin: Prolonged contact may cause skin irritation with local redness. Prolonged or widespread skin contact may result in absorption of potentially harmful amounts.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	**CAS number**	**Proportion**
MCPA (present as potassium salt)	94-74-6	420 g/L
Picloram (present as potassium salt)	1918-02-1	26 g/L
Other non-hazardous ingredients		Up to 100%

SECTION 4 – FIRST AID MEASURES

Swallowed	Do not induce vomiting. Give one cup of water or milk if available and transport to a medical facility. Do not give anything by mouth to an unconscious person.
Eye	Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist.
Skin	Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Obtain medical attention without delay. Wash clothing before reuse. Properly dispose of contaminated leather items, such as shoes, belts and watchbands.
Inhaled	If affected, remove from contaminated area to fresh air.

Advice to Doctor
Due to irritant properties, swallowing may result in burns ulceration of mouth, stomach and lower gastrointestinal tract with subsequent structure. Aspiration of vomitus may cause lung injury. Suggest endotracheal/esophageal control if lavage is done. No specific antidote. Treatment of exposure should be directed at the controlof symptoms and the clinical condition of the patient.

SECTION 5 – FIRE FIGHTING MEASURES

Fire/Explosion Hazard
Dangerous decomposition or Combustion Products
Toxic, irritating vapors may be produced if product is involved in fire.

Hazardous decomposition products
Hydrogen chloride and nitrogen oxides may be produced if product is involved in fire.

Hazardous reactions
Not known to occur.

Extinguishing Media
Carbon dioxide, dry chemical, foam, water fog

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spills and Disposal
Extinguish sources of ignition. Do not touch or walk through spilled material. Wear a face shield or goggles, overalls buttoned to neck and wrist, chemical resistant gloves and boots. Dike area and prevent entry into

waterways and drains. Absorb with material such as sand, soil or sawdust. Collect spilled product and place in sealable container for disposal. Spill residues may be cleaned using water and detergent. Contain and absorb wash water for disposal. Absorb and collect washings and place in the same sealable container for disposal.

SECTION 7 – HANDLING AND STORAGE

Storage
Store in tightly closed original container in a cool, dry well-ventilated area out of direct sunlight when not in use. Do not store with food, feedstuffs, fertilizers and seeds.

Handling
Keep out of reach of children. Causes eye and skin irritation. Harmful if inhaled. Avoid contact with eyes, skin and clothing. Users should wash hands before eating, drinking, chewing gum, using tobacco.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards:
None established

Engineering Controls:
Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

Personal Protection:
Eye/face protection
Use chemical goggles. Eye wash fountain should be located in immediate work area.

Skin protection
Use protective clothing chemical resistant to this material. Selective of specific items such as face shield, boots, apron or full body suit will depend on the task. Remove contaminated clothing immediately, wash skin area with soap and water and launder clothing before reuse or dispose of properly.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form:	liquid
Colour:	brown to black
Odour:	mild odour
Boiling point (°C):	100°C.
Vapour Pressure:	286 x 10^{-6} mm Hg at 32°C (MCPA) 615 x 10^{-7} mm Hg at 32°C (picloram acid)
Specific Density:	1.210 at 20°C.
Flashpoint:	Does not burn
Flammability Limits:	Not available
Solubility in Water:	soluble in water

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability:	This product is stable under normal storage conditions.
Conditions to Avoid:	None.
Incompatibilities:	Avoid oxidizing materials and strong acids.

Hazardous Polymerization: Hazardous polymerization is not possible.

SECTION 11 – TOXICOLOGICAL INFORMATION

Toxicity data:

Carcinogenicity The weight of the evidence is that MCPA is not carcinogenic.

Acute Toxicity - Oral
LD50 (rat) 1876 mg/kg for MCPA acid
LD50 (rat) >3500 mg/kg for picloram potassium salt

Acute Toxicity -Dermal
LD50 (rabbit) >2000 mg/kg for MCPA acid
LD50 (rabbit) >2000 mg/kg for picloram potassium salt

Acute Toxicity -Inhalation
LC50 (rat) (4hr) >6.36 mg/l for MCPA acid
LC50 (rat) >1.63 mg/L for picloram potassium salt

SECTION 12 – ECOLOGICAL INFORMATION

Known Harmful Effects on the Environment
The breakdown of picloram in soil is variable and is influenced by soil moisture, temperature and organic content. Under spill conditions or very high use rates, residues could remain in the soil up to four years, particularly in arid soils. At low application rates, under warm, moist conditions, residues decline sufficiently to allow growth of susceptible plants within twelve months. In soil, picloram is degraded by photodegradation and microbial action. In water, it is degraded by ultra-violet light with a half-life of one to forty days depending on sunlight intensity. Picloram typically remains in the top thirty centimetres of a soil profile depending on soil adsorption properties.

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

Persistence / Degradability
This material cannot be considered as readily biodegradable. Biodegradation under aerobic laboratory conditions is below detectable limits. Biodegradation rate may increase in soil and/or water with acclimation.

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

Acute Toxicity - Fish
LC50 (96hr) for rainbow trout is 50 mg/l for MCPA potassium salt
LC50 (96hr) for rainbow trout is 26 mg/l for picloram potassium salt

Acute Toxicity - Daphnia
EC50 (48hr) for daphnia is >190 mg/l for MCPA potassium salt.
EC50 (48hr) for daphnia is 63.8 mg/l for picloram potassium salt.

Acute Toxicity - Algae
LC50 for algae is >392 mg/l for MCPA potassium salt
EC25 for algae is 52.6 mg/l for picloram potassium salt.

Acute Toxicity - Other Organisms
Not toxic to birds.
Not toxic to bees.

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

UN Number:	None allocated
Proper Shipping Name:	None Allocated
SUSDP Classification:	S5
ADG Class:	None allocated. Not a dangerous good.
Hazchem Code:	None allocated.
Packing Group:	None allocated.

SECTION 15 – REGULATORY INFORMATION

SUSDP Classification	S5
Packaging & Labelling	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
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.

Acronyms:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail
AICS	Australian Inventory of Chemical Substances
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
SUSDP	Standard for the Uniform Scheduling of Drugs & Poisons
UN Number	United Nations Number

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