


SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name:	Kenso Agcare Kudos 850 WG Herbicide
Product Type:	Group 15 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 pre-emergence control of annual ryegrass, barley grass, annual phalaris, silver grass and toad rush and suppression of certain grass weeds in wheat (not durum wheat) and triticale as specified in the DIRECTIONS FOR USE table.

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. 
GHS Signal Word:	DANGER
Hazard statements:	H317: May cause an allergic skin reaction. H351: Suspected of causing cancer. H373: May cause damage to organs through prolonged or repeated exposure. H400: Very toxic to aquatic life. H410: Very toxic to aquatic life with long lasting effects.
Prevention:	P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P260: Do not breathe dust/fume/gas/mist/vapours/spray. P261: Avoid breathing dust/fume/gas/mist/vapours/spray. P272: Contaminated work clothing should not be allowed out of the workplace. P273: Avoid release to the environment. P280: Wear protective gloves/protective clothing/eye protection/face protection
Response:	P302 + P352: IF ON SKIN: Wash with plenty of soap and water. P308 + P313: IF exposed or concerned: Get medical advice/attention. P314: Get medical advice/attention if you feel unwell.

	P321: Specific treatment (see FIRST AID on this label)
	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:	P405: Store locked up.
Disposal:	P501: Dispose of contents and containers as specified on the registered label.
SUSMP Classification:	S6
ADG Classification:	Not a dangerous good.
UN Number:	None allocated.

Emergency Overview

Physical Description & colour: Light brown granules

Odour: No characteristic odour.

Major Health Hazards: Harmful if inhaled or swallowed. Will irritate the eyes and skin. Repeated exposure may cause allergic disorders.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
Pyroxasulfone	447399-55-5	85%
Inert ingredients	secret	to 100%

SECTION 4 – FIRST AID MEASURES

General Information:

If poisoning occurs, contact a doctor or Poisons Information Centre, Phone Australia 13 11 26.

Inhalation:	Remove the victim to fresh air until recovered. Seek medical attention if discomfort or irritation continues.
Skin contact:	Remove contaminated clothing, wash skin with plenty of soap and water. Seek medical attention if irritation persists.
Eye contact:	Flush eyes immediately with plenty of fresh water for at least 15 minutes while holding the eyelids open. Seek medical attention if irritation persists. Take special care if contact lenses are worn.
Ingestion:	If swallowed, rinse mouth thoroughly with water and 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).

Advice to Doctor

Treat symptomatically. There is no specific antidote. If more than a mouthful has been ingested, administer activated charcoal and sodium sulphate.

SECTION 5 – FIRE FIGHTING MEASURES

Fire/Explosion Hazards

Dangerous Decomposition or Combustion Products

Combustion Products may emit toxic fumes such as oxides of carbon, oxides of nitrogen, hydrogen cyanide, hydrogen fluoride, sulphur oxides.

Thermal Decomposition

This product is not flammable but likely to decompose only after heating to dryness, followed by further extreme heating.

Extinguishing Media

Preferred extinguishing media are water fog, carbon dioxide, dry chemical, foam, sand.

Fire Fighting

When fighting fires involving significant quantities of this product, call the fire brigade.

Wear full protective suit and self-contained breathing apparatus.

Whenever possible, contain fire-fighting water/ contaminated water by diking area with sand or earth. Do not allow it to enter drain or waterways.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spills and Disposal

Contain spill and absorb with sand or proprietary absorbent (vermiculite). Prevent from entering drains, waterways or sewers. Clean up spill immediately. Collect in sealed open-top containers for disposal. Triple rinse containers, and add rinsings to the spray tank, then offer container for recycling / reconditioning, or puncture top, sites and bottom and dispose of in landfill in accordance with local regulations. On-site disposal of concentrate is not acceptable.

SECTION 7 – HANDLING AND STORAGE

Handling

When opening the container and preparing the spray, wear cotton overalls buttoned to the neck and wrist, washable hat, elbow length PVC gloves, face shield or goggles. When using the prepared spray, wear cotton overalls buttoned to the neck and wrist, washable hat and elbow length PVC gloves. Make sure there is adequate ventilation and avoid dust formation. If product in eyes, wash out immediately with water. If product on skin, immediately wash area with soap and water. 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.

Storage

Store in the closed, original container in a dry, cool, well-ventilated area away from children, animals, food, feedstuffs, seed and fertilizers. DO NOT store for prolonged periods in direct sunlight.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards:

No exposure standard has been set for this product.

<u>Source</u>	<u>Material</u>	<u>TWA mg/m³</u>
Exposure standard has not been established by SWA for any of the significant ingredients in this product.		

Exposure Limits

The ADI for Pyroxasulfone is set at 0.02mg/kg/bw/day. The corresponding NOAEL is set at 2mg/kg/bw/day.

*ADI= Acceptable Daily Intake; NOAEL: No Observable Adverse Effect Level. Data adopted from Australia ADI List, March 2021.

Engineering Control

Handle in well ventilated areas, ensure natural ventilation at working area.

Protective Equipment

- Eyes: Wear eye and face protectors to protect against splashing materials. Make sure emergency eye wash facilities are near to working area.
- Clothing: Wear cotton overalls buttoned to the neck and wrist and a washable hat if skin exposure is likely.
- Gloves: Wear PVC or rubber gloves.
- Respiratory: Respirator is usually not necessarily required.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form:	Granules
Colour:	Light brown granules
Odour:	No characteristic odour
pH:	7.0 – 10.0
Vapour Pressure:	2.4 x 10 ⁻⁶ Pa at 25°C (technical)
Solubility	Dispersible 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

Store in the closed original container in a dry, cool, well-ventilated area. Avoid extreme temperature and direct sunlight.

Incompatibilities

Strong acids, strong bases, strong oxidising agents.

Fire Decomposition

Decomposition is likely only after heating to dryness, followed by further extreme heating. Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Oxides of nitrogen, hydrogen cyanide, hydrogen fluoride, sulphur oxides. Water. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

Polymerisation

This product is unlikely to undergo polymerisation reactions.

SECTION 11 – TOXICOLOGICAL INFORMATION

Toxicity data:

Acute Toxicity – Oral

LD₅₀ (rat): >2000 mg/kg

Acute Toxicity - Dermal

LD₅₀ (rat): >2000 mg/kg

Acute Toxicity – Inhalation:

LC₅₀ (rat) (4hr): >5.8 mg/l air

Skin irritation: Non-irritant (Rabbit)

Eye irritation: Slight eye irritation (Rabbit)

Sensitization: Skin sensitizing (Guinea pig)

Potential Health Effects

Health Effects

Inhalation: May be harmful if inhaled.
Skin contact: May cause skin irritation. It can cause sensitivity to skin.
Eye contact: May cause eye irritation.
Ingestion: Harmful if swallowed.

Mutagenicity

Data indicates no mutagenic effects for Pyroxasulfone.

Carcinogenicity

Data indicates no carcinogenic effects for Pyroxasulfone.

There is an increased incidence of tumours in urinary bladder of rats through non-genotoxic mechanism. Not relevant at low doses.

Other Information

The ADI for Pyroxasulfone is set at 0.02mg/kg/bw/day. The corresponding NOAEL is set at 2mg/kg/bw/day.

*ADI= Acceptable Daily Intake; NOAEL: No Observable Adverse Effect Level. Data adopted from Australia ADI List, March 2021.

SECTION 12 – ECOLOGICAL INFORMATION

Acutely toxic for fish. Acutely toxic for aquatic invertebrates. Very toxic (acute) to aquatic plants.

Ecotoxicity data

Acute Toxicity – Bird

LD₅₀ bobwhite quail: 2250mg/kg (Value relates to active ingredient pyroxasulfone.)

Acute Toxicity – Fish

LC₅₀ rainbow trout (96 hrs): 2.2 mg/L (Value relates to active ingredient pyroxasulfone.)

LC₅₀ Bluegill sunfish (96 hrs): 2.8 mg/L (Value relates to active ingredient pyroxasulfone.)

Acute Toxicity – Crustaceans

Daphnia LC₅₀ (48 hrs): 4.4 mg/L (Value relates to active ingredient pyroxasulfone.)

Acute Toxicity – Other organisms

MCPA

Bees: LD₅₀: >100 µg/bee (Value relates to active ingredient pyroxasulfone.)

ENVIRONMENTAL FATE

Breakdown in soil and groundwater

Pyroxasulfone is mobile (average K_{oc}= 94.75) and persistent has low persistence. Half-life in soil ranges from 142 to 533 days in both terrestrial and aquatic environments. Pyroxasulfone does not present significant concerns for bioaccumulation based on the lipophilicity of the compound.

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

Storage and Transport:	Considered non dangerous for road and rail transport (in packaging) by the Australian Code for the Transport of Dangerous Goods by Road and Rail. Ref: ADG7; SP No. AU01.
UN Number (Sea Transport):	3077
IMO Class/Packing Group:	Class 9; Packaging Group III
IMO Marine Pollutant:	Marine Pollutant
IMO Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains Pyroxasulfone)
Hazchem code:	2Z

SECTION 15 – REGULATORY INFORMATION

SUSMP Classification	S6
Packaging & Labelling	CAUTION 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 0439 933 556

Ask for Murray Goodlich