

SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name:	Kenso Agcare Ken-Chlor 750 Water Dispersible Granule Herbicide
Product Type:	Group B 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 Annual (Wimmera) Ryegrass and certain broadleaf weeds in winter cereal crops.

SECTION 2 – HAZARDS IDENTIFICATION

Statement of Hazardous Nature

This product is classified as: non Hazardous according to the criteria of NOHSC Australia.
Not a Dangerous Good according to the Australian Dangerous Goods (ADG) Code.



GHS Signal Word:	WARNING
Hazard statement:	H410: Very toxic to aquatic life with long lasting effects.
Prevention:	P273: Avoid release to the environment.
Response:	P391: Collect spillage.
Disposal:	P501: Dispose of contents and containers as specified on the registered label.
SUSMP Classification:	S5
ADG Classification:	Not a dangerous good.
UN Number:	N/A

Emergency Overview

Physical Description & colour: White to off-white granulated solid.

Odour: No odour.

Major Health Hazards: Toxicity described in animals from the administration of a single dose of Chlorsulfuron include lung changes, weakness and other nonspecific effects. Repeated dosing caused decreased weight gain, and haematological and clinical chemical changes. Long-term dosing resulted in decreased body weight gain, and slight haematological changes.

Potential Health Effects

Health Effects No LD₅₀ information is available for this product.

Acute:

Swallowed: Very low toxicity by ingestion.

Eye: Irritation (rabbit): Administration of 10mg to rabbit's eye produced very mild temporary conjunctival irritation and slight corneal cloudiness. All effects reversed in 4 days.

Skin: Slightly to moderately toxic by contact. Not a primary skin irritant, or a sensitiser.

Inhaled: May irritate the throat but no data available.

Others: No data available to confidently predict the effects of overexposure to humans, however based on animal studies, overexposure by inhalation, ingestion, or skin or eye contact may initially include eye irritation with discomfort, tearing, or blurring of vision, or irritation of the upper respiratory passages.

Chronic:

Chlorsulfuron

Administration of 0, 100, 500 and 2500 ppm chlorsulfuron to male and female young adult dogs for 6 months produced a no-observable-effect level (NOEL) of 2,500 ppm in the diet. No compound related changes in nutritional, clinical, biochemical, gross, or histopathological observations were made. Administrations of 0, 100, 200 and 2500 ppm chlorsulfuron to male and female weaning rats for 2 years produced a NOEL of 100 ppm in the diet based on mild to moderate reduction in mean body weights and weight gains in male rats from the higher dose groups.

Oncogenicity studies conducted with male and female mice by dietary administration of 0, 100, 500 and 5,000 ppm chlorsulfuron for 2 years showed no compound-related behavioural, clinical haematological, gross pathological, or histological abnormalities. Chlorsulfuron was not oncogenic at any level. The overall NOEL was 500 ppm as a body weight reduction occurred in the 5,000 ppm level. The dietary presence of chlorsulfuron at 500ppm had no adverse effect on the reproduction or lactation performance of young adult rats (3 generation, 2 litters per generation). Not teratogenic rats at 2,500 ppm or up to 75mg/kg in rabbits. Not mutagenic in Ames bacterial assay. Chinese Hamster Ovary mammalian cell assay, rat dominants lethal assay, in vitro cytogenetic assay, or DNA repair assay.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
Chlorsulfuron	64902-72-3	75 %w/w
Inert ingredients	secret	to 100 %w/w

SECTION 4 – FIRST AID MEASURES

Swallowed:	If swallowed; immediately give 2 glasses of water and induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention.
Skin:	Flush in water after excessive contact.
Eyes:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention.
Inhaled:	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

Advice to Doctor

No specific requirements. Treat symptomatically.

SECTION 5 – FIRE FIGHTING MEASURES

Fire/Explosion Hazard

Dangerous Decomposition or Combustion Products

Thermal Decomposition

Stable at normal temperatures and storage conditions. Decomposes with heat. Polymerization will not occur. Flammable limit in Air, % by volume; LEL 0.090 g/L.

Extinguishing Media

Water spray and dry chemical.

Fire Fighting

Wear self-contained breathing apparatus. Use water spray. Cool tanker/container with water spray. If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the contamination hazard.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spills & Disposal

Recover the product by sweeping up or vacuuming without raising dust. Collect spilled material and waste in sealable open-top type containers for disposal.

Personal Protection

Avoid skin and eye contact. Avoid inhaling the vapour, or spray mist. After use and before eating, drinking, or smoking, wash hands, arms and face thoroughly with soap and water.

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 Limits

No exposure standards have been established for this product by Worksafe Australia, however, the TWA exposure standard for dusts not otherwise specified is 10 mg/m³.

Respiratory Protection

Do not inhale spray mist. Wear a class P1 dust mask if dusts are present.

Personal Protective Equipment

It is good practice to wear suitable personal protective equipment (PPE). When opening the container, preparing the spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, nitrile or elbow-length PVC gloves and face shield or goggles and disposable dust mask.

Engineering Controls

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

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

Form:	granules
Colour:	off-white to tan
Melting point (°C):	Not applicable
Vapour Pressure:	Not applicable
Specific Density:	0.59 ± 0.01
Solubility:	Dispersible

SECTION 10 – STABILITY AND REACTIVITY

Stability

Hydrolyses at pH <7.

Hazardous Polymerization

Hazardous polymerisation is not possible.

Hazardous Reaction

Keep away from strong oxidising agents.

SECTION 11 – TOXICOLOGICAL INFORMATION

Toxicology Information

No harmful effects are expected if the precautions on the label and this SDS are followed.

Acute Toxicity – Oral

LD₅₀ (male rats) 5,545 mg/kg for chlorsulfuron

Acute Toxicity – Inhalation

LC₅₀ (rat) (4hr) >5.9 mg/l for chlorsulfuron

Other Information

The Australian Acceptable Daily Intake (ADI) for chlorsulfuron for a human is 0.05 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 5 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, August 2003).

SECTION 12 – ECOLOGICAL INFORMATION

Other Precautions:

Do not spray in high winds. Do not contaminate dams, waterways or sewers with this product.

Persistence / Degradability:

Slowly hydrolyses in water at neutral pH (50% hydrolysis in 4-8 weeks at 20°C), more rapid hydrolysis occurs in acid solution.

Acute Toxicity - Fish

Not toxic to fish.

LC₅₀ (96 hr) for rainbow trout is >250 mg/l for chlorsulfuron

Acute Toxicity - Daphnia

LC₅₀ (48 hr) for daphnia is 370 mg/l for chlorsulfuron.

Acute Toxicity – Other Organisms

The following data is for the active ingredient, chlorsulfuron.

Birds: Not toxic to birds. LD₅₀ for mallard ducks and bobwhite quail is >5000 mg/kg

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

ADG Class:

None allocated. Not a dangerous good.

Hazchem Code: None allocated.

Packing Group: None allocated.

SECTION 15 – REGULATORY INFORMATION

SUSMP Classification S5
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