

MATERIAL SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name: Kenso Agcare Ken-Trel 750 SG 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 a wide range of broadleaf weeds in wheat, barley, oats, triticale, canola, pastures and fallow land as specified in the Direction For Use.

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.

Risk Phrases: R22, R36, R65, R66. Harmful if swallowed. Irritating to eyes. Harmful: May cause lung damage if swallowed. Repeated exposure may cause skin dryness or cracking.

Safety Phrases: S20/21, S46, S24/25, S36/37. Keep out of reach of children. When using, do not eat or drink. If swallowed, contact a doctor or Poisons Information Centre immediately and show this container or label. Avoid contact with skin and eyes. Wear suitable protective clothing and gloves.

SUSDP Classification: S5

ADG Classification: None allocated. Not a Dangerous Good.

UN Number: None allocated

Emergency Overview

Physical Description & colour: White granules.

Odour: No odour.

Major Health Hazards: No significant risk factors have been found for this product.

Potential Health Effects

Acute:

Swallowed: This product may be irritating to mucous membranes but is unlikely to cause anything more than transient discomfort.

Eye: Exposure via eyes will cause mild irritation to eyes.

Skin: This product is not hazardous in normal use. However product is believed to be mildly irritating, but is unlikely to cause anything more than mild transient discomfort.

Inhaled: Exposure via this route is unlikely due to the granular formulation.

Chronic Effects:

Possible chronic health effects from exposure to Ken-Trel 750 SG Herbicide are based on the active ingredient. Rats and mice administered the active ingredient, clopyralid, in long-term carcinogenicity studies showed no increase in tumours when compared to the untreated group. Studies in rats and this formulation are not listed as carcinogenic in Worksafe's document "Exposure Standards for Atmospheric Contaminants in the Occupational Environment" (May 1995).

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
Clopyralid	1702-17-6	75 % w/w
Other non hazardous ingredients		To 100 % w/w

SECTION 4 – FIRST AID MEASURES

Swallowed	If swallowed, wash mouth with plenty of water. If symptoms develop, or if in doubt contact the Poisons Information Centre or a doctor immediately.
Eye	If in eyes, hold eyes open and flood with water for at least 15 minutes and see a doctor.
Skin	If on skin, remove contaminated clothing, wash skin thoroughly with soap and water.
Inhaled	If inhalation has occurred, remove from contaminated area to fresh air.

Advice to Doctor:

Treat symptomatically.

SECTION 5 – FIRE FIGHTING MEASURES

Fire and Explosion Hazards: There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

This product is likely to decompose only after heating to dryness, followed by further strong heating.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Extinguishing Media: Not Combustible. Use extinguishing media suited to burning materials. Water fog or fine spray is the preferred medium for large fires. Ensure that no spillage enters drains or water courses.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade.

Flash point: Does not burn.

Upper Flammability Limit: Does not burn.

Lower Flammability Limit: Does not burn.

Autoignition temperature: Not applicable – does not burn.

Flammability Class: Does not burn.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spills and Disposal

Wear protective equipment (see Personal Protection). Clear area of all unprotected personnel. Prevent entry of chemical or used/damaged containers into drains, streams or waterways.

Small Spill: Sweep up material and contain in a refuse vessel for disposal (see Disposal).

Large Spill: Place leaking containers into salvage drums. Sweep up material and contain in a refuse vessel for disposal (see Disposal). Contact Emergency Services on 000 immediately.

Disposal

Contaminated material must be disposed of in accordance with all State and/or Local regulations. Shred and bury empty packaging in a local authority landfill. If no landfill is available, bury the packaging below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty packaging and product should not be burnt.

SECTION 7 – HANDLING AND STORAGE

Storage and Transport

This product is an S5 Poison. Observe all relevant regulations regarding sale, transport and storage of this class of product. Store in tightly closed original container in a dry, cool, well-ventilated area, out of direct sunlight. Do not store near food, feedstuffs, fertilisers or seed.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards:

A time weighed average (TWA) concentration for an 8 hour day, and 5 day week has not been established by The National Occupational Health & Safety Commission for any of the major ingredients in this product. There is a blanket limit of 10mg/m³ for dusts or mists when limits have not otherwise been established. The nature of this product makes it unlikely that this level will be approached in normal use. The ADI (Acceptable Daily Intake) for Clopyralid is set at 0.5mg/kg/day. The corresponding NOEL (No-observable-effect-level) is set at 50mg/kg/day. Values taken from Australian ADI List, January, 2001.

Engineering Controls

In industrial situations, concentration values below the TWA value should be maintained. Values may be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high; you are advised to modify the process or environment to reduce the problem.

Personal Protection

Will irritate the eyes. Avoid contact with eyes. Wash hands after use. When using the prepared spray, wear elbow length PVC gloves and face shield or goggles. After each day's use, wash gloves and face shield or goggles.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form:	granules
Colour:	white
Odour:	No odour
Melting point (°C):	Not applicable
Boiling point (°C):	Not applicable
Bulk density:	0.72 g/mL (loose) 0.79g/mL (compacted)
Vapour Pressure:	133 mPa at 24°C (clopyralid acid)
Flashpoint:	Does not ignite before melting, with decomposition, at 280-290°C
Explosive Properties:	Not explosive
Oxidising Properties:	Non-oxidising

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 out of direct sunlight.

Incompatibilities: strong acids, strong bases, strong oxidising agents.

Fire Decomposition: This product is likely to decompose only after heating to dryness, followed by further strong heating. Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. 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 will not undergo polymerisation reactions.

SECTION 11 – TOXICOLOGICAL INFORMATION

Local Effects:

Target Organs: none known

Clopyralid: LD₅₀ Oral, Rat 3738 (male)-2675 (female) mg/kg LD₅₀ Dermal, Rat = >2000mg/k

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: For a similar material, clopyralid acid, in animals, effects have been reported on the following organs: heart, kidney, and liver.

CANCER INFORMATION: A similar material, clopyralid acid, did not cause cancer in laboratory animals.

TERATOLOGY (BIRTH DEFECTS): A similar material, clopyralid acid, caused birth defects in test animals, but only at greatly exaggerated doses that were severely toxic to the mothers. No birth defects were observed in animals given clopyralid at doses several times greater than those expected during normal exposure.

REPRODUCTIVE EFFECTS: For a similar material clopyralid acid, in laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent.

MUTAGENICITY: For a similar material, clopyralid acid, in-vitro and animal genetic toxicity studies were negative.

SECTION 12 – ECOLOGICAL INFORMATION

Toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment. This product is not biodegradable; it may accumulate in the soil or water and cause long term problems.

Birds: LD₅₀ mallard: 1465mg/kg LD₅₀ bobwhite quail: >2000mg/kg

Fish: LC₅₀ rainbow trout: 103.5mg/L LC₅₀ bluegill sunfish: 125mg/L

Bees: LD₅₀ non toxic

Worms: LD₅₀ (Worms) >1000mg/kg

ENVIRONMENTAL FATE

In soil, Clopyralid will be degraded by microbial action within twelve months, with the most rapid breakdown occurring in warm, moist, aerated soils with high organic content. Clopyralid has a half-life between twelve and seventy days depending on soil type and climatic conditions. Minimal leaching of Clopyralid occurs and residues typically remain in the top fifteen centimetres of the soil profile. Clopyralid is not broken down in water by sunlight or hydrolysis.

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 Code: This product is not classified as a Dangerous Good. No special transport conditions are necessary unless required by other regulations.

SECTION 15 – REGULATORY INFORMATION

AICS: All of the significant ingredients in this formulation are to be found in the public AICS Database. The following ingredients: Diclofop-methyl, Liquid hydrocarbon, are mentioned in the SUSDP.

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