

SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name:	Kenso Agcare Ken-Met 600 WG Herbicide
Product Type:	Group B 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 brush and broadleaf weeds in native pastures, agricultural non-crop areas, rights-of-way, commercial and industrial areas and for the control of certain broadleaved weeds in winter cereal crops as per directions for use table.

SECTION 2 – HAZARDS IDENTIFICATION

Hazard Classification:	Classified as non-hazardous according to criteria of Safe Work Australia. Not classified as a Dangerous Good according to the ADG Code.
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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/container as specified on the registered label.
SUSMP Classification:	S5
ADG Classification:	Not a dangerous good.
UN Number:	None allocated.

Emergency Overview

Physical Description & colour: Off-white granulated solid.

Odour: No odour.

Major Health Hazards: Systemic poisoning by sulfonylurea based compounds is unlikely, unless large quantities have been ingested. No accounts of poisoning by Metsulfuron-methyl are currently available. No significant risk factors have been found for this product.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
Metsulfuron methyl	74223-64-6	60%
Inert ingredients	secret	to 100%

SECTION 4 – FIRST AID MEASURES

Inhalation:	Remove person to fresh air and keep at rest until fully recovered.
Skin contact:	Wash contaminated skin with plenty of water. Remove contaminated clothing and wash before re-use.
Eyes contact:	Immediately irrigate with plenty of water for at least 15 minutes. Seek medical attention.
Ingestion:	The product is not likely to be hazardous by ingestion. Seek medical attention if necessary.

Advice to Doctor

No specific requirements. Treat symptomatically.

SECTION 5 – FIRE FIGHTING MEASURES

Fire/Explosion Hazards

Dangerous Decomposition or Combustion Products

Thermal Decomposition

Not a fire or explosion hazard. Extinguish fire with foam, water spray, dry powder, carbon dioxide (CO₂). On small fires, if area is heavily exposed to fire and if conditions permit let fire burn itself out since water may increase the contamination hazard. Fine dust dispersed in air (particularly in confined spaces) may ignite if exposed to high temperature ignition source.

Extinguishing Media

Extinguish fire with foam, dry powder, carbon dioxide or water spray.

Fire Fighting

Wear self-contained breathing apparatus. Use water spray, Runoff from fire control may be a pollution hazard.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spills and Disposal

Pick up bulk material by sweeping or other effective means and place into drums. Do not flush with water. If spill area is on ground near trees or other valuable plants, remove top 15cm of soil after initial cleanup. Should product contact soil, apply activated charcoal. Activated charcoal will absorb but not completely neutralise the product. Cleanup crew should wear rubber gloves and protective clothing.

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 day's 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
Metsulfuron methyl AEL	10 mg/m ³ (8 and 12 hour TWA)
Worksafe	10 mg/m ³ ; dusts not otherwise classified

Engineering Control

Use only with adequate ventilation.

Personal Protective Measures

May irritate the eyes and skin. Avoid contact with eyes and skin. Do not inhale dust or spray mist.

After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form:	Granules
Colour:	Off White
Odour:	None
Melting Point (°C):	Not applicable
Boiling Point (°C):	Not applicable
Vapour Pressure:	Not applicable
Bulk Density:	0.58 ± 0.01
Solubility	Dispersible

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

Containers should be kept dry. Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

Incompatibilities

Strong oxidising agents.

Fire Decomposition

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. Oxides of sulfur (sulfur dioxide is a respiratory hazard) and other sulfur compounds. Most will have a foul odour. Water. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death. Hydrogen cyanide poisoning signs and symptoms are weakness, dizziness, headache, nausea, vomiting, coma, convulsions, and death. Death results from respiratory arrest. Hydrogen cyanide gas acts very rapidly; symptoms and death can both occur quickly.

SECTION 11 – TOXICOLOGICAL INFORMATION

Toxicity Data (on metsulfuron methyl)

Acute Toxicity – Oral

LD₅₀ (rats): > 5000 mg/kg

Acute Toxicity – Dermal

LD₅₀ (rats): > 2000 mg/kg

Potential Health Effects

Health Effects

No LD₅₀ information is available for this product.

Acute:

Inhalation:

Low toxicity through this route.
May irritate throat.

Skin contact:

Low toxicity through this route.
Repeated dermal contact with metsulfuron methyl may cause skin irritation with itching, burning, redness, swelling or rash. Not a primary skin irritant or sensitiser.

Eye contact:

May cause eye irritation with tearing, blurred vision or pain.

Ingestion:

Low toxicity.

Chronic:

None available for formulated product. Animal testing with the technical indicated that there is no carcinogenic, developmental or reproductive effects. There is a report indicating that metsulfuron methyl produced genetic damage in a mammalian cell culture test, however, other tests with metsulfuron methyl in bacterial and mammalian cell cultures and in animals did not produce genetic damage. The weight of evidence suggests that metsulfuron methyl

does not cause genetic damage. Long term administration to animals caused body weight loss.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity data (on metsulfuron methyl)

LC₅₀ (96 h) Bluegill sunfish > 150 mg/L

LD₅₀ (mallard duck) > 2510 mg/kg

8 day oral LC₅₀ (bobwhite quail) > 5620 mg/kg

Environmental Fate

Breakdown of Chemical in Soil and Groundwater: The breakdown of Metsulfuron-methyl in soils is largely dependant on soil temperature, moisture content, and pH. The chemical will degrade faster under acidic conditions, and in soils with higher moisture content and higher temperature. The chemical has a higher mobility potential in alkaline soils than in acidic soils, as it is more soluble under alkaline conditions. Metsulfuron-methyl is stable to photolysis, but will break down in ultraviolet light. Half-life estimates for Metsulfuron-methyl in soil are wide ranging from 14 - 180 days, with an overall average of reported values of 30 days. Reported half-life values (in days) for soil include: clay - 178 ; sandy loam - 102 ; clay loam - 70 , 14-28 , 14-105 ; silty loam - 120-180.

Breakdown of Chemical in Surface Water: The dissipation time for Metsulfuron-methyl was investigated in a mixed wood/boreal forest lake. The DT50 or length of time required for half of the material to dissipate in water was >84 days when high concentrations of Metsulfuron-methyl were applied, and 29.1 days at concentrations that might be expected if the chemical is applied for forestry uses. It is stable to hydrolysis at neutral and alkaline pHs, and has a half-life of 3 weeks at pH 5.0, 25°C and >30 days at 15°C. Breakdown of Chemical in Vegetation: Metsulfuron-methyl is rapidly taken up by plants at the roots and on foliage. The chemical is translocated throughout the plant, but is not persistent. It is broken down to non-herbicidal products in tolerant plants.

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	Not a dangerous good.
UN Number (Sea Transport):	None allocated.
IMO Class/Packing Group:	None allocated.
IMO Marine Pollutant:	None allocated.
IMO Proper Shipping Name:	None allocated.
Hazchem code:	None allocated.
ADG Class:	Not a dangerous good.

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