

MATERIAL 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: 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 brush and broadleaf weeds in native pastures, rights of way, commercial and industrial areas.

SECTION 2 – HAZARDS IDENTIFICATION

Statement of Hazardous Nature

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

Risk Phrases: Not Hazardous - No criteria found.
Safety Phrases: S23 Do not breathe mists or spray
S24/25 Avoid contact with skin and eyes
SUSDP Classification: None allocated.
ADG Classification: None allocated. Not a Dangerous Good under the ADG Code.
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.

Potential Health Effects

Health Effects No LD₅₀ information is available for this product.

Acute:

Swallowed: Low toxicity.

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

Skin: 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.

Inhaled: Low toxicity through this route.
May irritate throat.

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 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
Metsulfuron methyl	74223-64-6	60 % w/w
Inert ingredients	secret	40 % w/w

SECTION 4 – FIRST AID MEASURES

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

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.

Hazardous decomposition products

None known

Hazardous reactions

None known

Extinguishing Media

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

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

Storage and Transport

Keep container tightly closed. Store in a cool, well-ventilated area away from foodstuffs.

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:	1.58 ± 0.01
Flashpoint:	Not applicable

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: (metsulfuron methyl)Acute oral LD₅₀ (rats): > 5000 mg/kg

Acute dermal toxicity > 2000 mg/kg

LC₅₀ (96 h) Bluegill sunfish > 150 mg/LLD₅₀ (mallard duck) > 2510 mg/kg8 day oral LC₅₀ (bobwhite quail) > 5620 mg/kg**SECTION 12 – ECOLOGICAL INFORMATION**

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**

(1) After intended use:

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point.

If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

(2) After spill or accident

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. Dispose of sealed containers at approved local waste disposal site.

SECTION 14 – TRANSPORT INFORMATION

UN Number:	None Allocated
Proper Shipping Name:	None Allocated
ADG Class:	None Allocated
Hazchem Code:	None Allocated
Packing Group:	None Allocated

SECTION 15 – REGULATORY INFORMATION

Poison schedule	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