

SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name: Kenso Agcare Ken-Pam 423 Fumigant
Product Type: Dithiocarbamate
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: Pre-planting treatment for control of soil-borne pests as per the Directions for Use Table.

SECTION 2 – HAZARDS IDENTIFICATION

Hazard Classification: Classified as hazardous according to criteria of Safe Work Australia.
Classified as a Dangerous Good according to the ADG Code.



Classification of the Hazardous Chemical: Acute toxicity (Dermal) – Category 4
Skin corrosion/ irritation – Category 1
Skin Sensitization – Category 1, 1A, 1B
Hazardous to the aquatic environment, short term – Acute 1

GHS Signal Word: **DANGER**

Hazard statements: H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H317: May cause an allergic skin reaction.
H400: Very toxic to aquatic life.
Prevention: P260: Do not breathe dusts or mists.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P264: Wash contacted areas thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
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: P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor/ physician if you feel unwell.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor/physician.

P321: Specific treatment (see FIRST AID on this label)

P330: Rinse mouth.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P363: Wash contaminated clothing before reuse.

P391: Collect spillage.

P405: Store locked up.

P501: Dispose of contents/container as specified on the registered label

Storage:

Disposal:

SUSMP Classification:

ADG Classification:

UN Number:

S6

Class 8: Corrosive.

3267, CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (contains METHAM SODIUM)

Emergency Overview

Physical Description & colour: Amber to yellow-greenish liquid

Odour: pungent odour

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
Metham (present as sodium salt)	137-42-8	42.3%
Water	7732-18-5	To 100%

SECTION 4 – FIRST AID MEASURES

Ingestion:	If poisoning occurs get to a doctor or hospital quickly, warning by telephone of the estimated arrival time so that treatment is not delayed. Do not induce vomiting. DO NOT delay the start of treatment.
Skin contact:	Immediately take off all contaminated clothing. Wash skin immediately with water followed by soap and water. If swelling, redness, blistering or irritation occurs seek medical attention. Contaminated clothing should be laundered before reuse.
Eyes contact:	Immediately irrigate with copious quantities of water for at least 20 minutes. Eyelids to be held open. Urgently seek medical assistance. Transport to hospital or medical centre.
Inhalation:	Remove victim from exposure. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Obtain immediate medical attention.

Advice to Doctor:

Treatment is symptomatic.

SECTION 5 – FIRE FIGHTING MEASURES

Combustibility

Non-combustible

Polymerisation

Not known to occur

Hazardous Combustion Product

During a fire, smoke may contain the original material in addition to combustion products of varying composition that may be toxic and/ or irritating. Take appropriate protective measures. It may emit oxides of nitrogen, and possibly toxic fumes.

Special Fire Fighting Procedures

Evacuate personnel to a safe area. Always wear positive-pressure self-contained breathing apparatus and full protective clothing. Clean all clothing before reuse.

Extinguishing Media

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

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

Flash point: N/A

SECTION 6 – ACCIDENTAL RELEASE MEASURES

General Instructions: Wear appropriate protective equipment. Contact with moisture in the soil can generate the flammable and Toxic gases MITC and Hydrogen sulfide. Keep bystanders upwind and away from the spill.

Small Spill: For clean up of a spill from a single shipping pack soak up with sand or other non-combustible absorbent material and place into containers for disposal. If applicable, wash the area with detergent and water.

Large Spill: Prevent spillage from entering drains or water courses. Wear protective clothing as overalls, goggles and gloves. Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Ensure legality of disposal by consulting regulations prior to disposal.

Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

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

General Instructions: The following Australian Standards will provide general advice regarding safety clothing and equipment: Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS2919**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

Exposure limits: Exposure limits have not been established by ASCC for any of the significant ingredients in this product. No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: Use only with adequate ventilation. Provide general and/ or local exhaust ventilation to control airborne levels below the exposure guidelines. Make sure that the work environment remains clean and that vapours and mists are minimised.

Eye Protection: Eye protection such as protective glasses or goggles are required when this product is being used. Emergency eyewash facilities must also be available in an area close to where this product is being used.

Skin Protection: Use protective clothing always. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Colour:	Amber to yellow-greenish liquid
Odour:	Pungent odour
pH:	9-11
Melting point (°C):	< -5°C
Boiling point (°C):	Approximately 100°C
Specific Gravity:	1.21
Vapour Pressure:	N/A
Flash Point	N/A
Flammability Limits:	N/A
Combustibility:	Non combustible
Volatility:	Not volatile
Solubility	Soluble
Corrosiveness:	Corrosive

SECTION 10 – STABILITY AND REACTIVITY

Chemical Reactivity

Metham sodium is stable in concentrated solution, but unstable when diluted, decomposition being promoted by soil, acids and heavy metal salts. The activity of metham sodium is due to the formation of methyl isothiocyanate in contact with soil.

Conditions to Avoid

Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

Incompatibilities

It is incompatible with additional water and strong aqueous acids. In addition, it is corrosive to brass, copper and zinc.

Fire Decomposition

During a fire, smoke may contain the original material in addition to combustion products of varying composition that may be toxic and/ or irritating. Take appropriate protective measures. It may emit oxides of nitrogen and possibly toxic fumes of hydrogen sulfide.

Polymerisation

This product is unlikely to undergo polymerisation processes.

SECTION 11 – TOXICOLOGICAL INFORMATION

Chronic Effects

Somnolence, cardiac and respiratory disorders. Repeated exposures may cause allergic disorders.

Acute Toxicity – Oral

LD₅₀ (male rats) 1800 mg/kg for metham sodium, LD₅₀ (female rats) 1700 mg/kg for metham sodium, LD₅₀ (mice) 285 mg/kg for metham sodium Note: Some reports place the LD₅₀ (oral, rat) as low as 450 mg/kg, and for mice at 50 mg/kg. The Therapeutic Goods Administration uses a value of 650 mg/kg (oral, rat).

Acute Toxicity – Dermal

LD₅₀ (rabbits) 1300 mg/kg

Acute Toxicity – Inhalation

LC₅₀ (rat) (4hr) >4.7 mg/l for pure ingredient.

Human Effects

Acute Over Exposure:

Gastro-enteritis with possibility of shock and renal lesions.

Skin irritation: MODERATE IRRITANT

Eye irritation: Slight Irritant

Sensitisation: Not a sensitiser

Potential Health Effects

Health Effects

This product is toxic according to NOHSC Australia.

Acute:

Inhalation:

It is harmful if inhaled, if liquid enters nasal passages, it will cause pain and burn nasal membranes. Patients with inhalation burns may develop acute pulmonary oedema.

Skin contact:

Contact with skin will result in severe irritation. Can cause inflammation and in severe cases blistering of the skin. This product

is a skin sensitiser. In addition, product is corrosive to the skin. Capable of causing moderate to severe burns with ulceration. Can penetrate to deeper layers of skin, resulting in third degree burns. Corrosion will continue until product is removed or neutralised. Severity depends on concentration and duration of exposure. Burns may not be immediately painful; the onset of pain may be minutes to hours.

Eye contact: A serious hazard leading to crying, inflammation of the eye and conjunctivitis.
Prolonged contact with the product can result in serious damage to eyes.

Ingestion: It is harmful if swallowed. This product is corrosive to the gastrointestinal tract. Capable of causing moderate to severe burns with ulceration. Can penetrate to deeper layers of skin, resulting in third degree burns. Corrosion will continue until product is removed or neutralised. Severity depends on concentration and duration of exposure.

SECTION 12 – ECOLOGICAL INFORMATION

This product is very toxic to aquatic organisms. Very toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment. This product is biodegradable. It will not accumulate in the soil or water or cause long term problems. This product is unlikely to accumulate in body tissues.

Environmental Protection

Acute Toxicity - Fish The following is data for the active ingredient, metham sodium.

LC₅₀ (96hr) for guppy is 4.2 mg/l.

LC₅₀ (96hr) for bluegill sunfish is 0.39 mg/l.

LC₅₀ (96hr) for rainbow trout is 0.079 mg/l.

Acute Toxicity -

Other Organisms

Dietary LC₅₀ (5 days) mallard duck and japanese quail is >5000 mg/kg

Not toxic to bees.

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

UN Number: 3267
Proper shipping name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S (contains METHAM SODIUM)
Class: 8 Corrosive Substances

Packaging group: III
Hazchem: 2X

IMO-IMDG

UN Number: 3267
Proper shipping name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S (contains METHAM SODIUM)
Class: 8 Corrosive Substances
Packaging group: III
Marine pollutant: Yes

SECTION 15 – REGULATORY INFORMATION

SUSMP Classification S6
Packaging & Labelling POISON
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
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
SUSMP Standard for the Uniform Scheduling of Medicines & 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 0428 776 327
Ask for Russell Clark