

SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name: Kenso Agcare Captan 900 WG Fungicide
Product Type: Group M4 Fungicide
Company Name: Kenso Corporation (M) Sdn Bhd
Address: Level 1, 98 Commercial Road, Teneriffe, 4005 QLD.
Telephone Number: (07) 3216 1188
Facsimile Number: (07) 3216 0388
Emergency Telephone Number: 000 (Police or Fire Brigade)
13 11 26 (Poisons Information Centre)
Use: For the control of certain diseases in a range of fruit crops, turf & ornamentals as per directions for use.

SECTION 2 – HAZARDS IDENTIFICATION

Hazard Classification: Classified as hazardous according to criteria of Safe Work Australia. Not classified as a Dangerous Good according to the ADG Code.



Classification of the Hazardous Chemical: Skin sensitization – Category 1
Serious eye damage/eye irritation – Category 1
Acute toxicity (Inhalation) – Category 3
Carcinogenicity – Category 2
Hazardous to the aquatic environment, short term – Acute 1

GHS Signal Word: **DANGER**

Hazard statements: H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H331: Toxic if inhaled.
H351: Suspected of causing cancer.
H400: Very toxic to aquatic life.

Prevention: P202: Do not handle until all safety precautions have been read and understood.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P271: Use only outdoors or in a well-ventilated area.
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: P302+P352: IF ON SKIN: Wash with plenty of soap and water.
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.

P308+P313: IF exposed or concerned: Get medical advice/ attention.

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

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

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

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

P391: Collect spillage.

Storage: P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

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

SUSMP Classification: S6

ADG Classification: N/A

UN Number: N/A

Emergency Overview

Physical Description & colour: Pale beige granule

Odour: Faint characteristic

Major Health Hazards: Harmful if inhaled or swallowed. May irritate the nose and throat and skin. Will damage eyes. Repeated exposure may cause allergic disorders.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
Captan	133-06-2	90%
Inert ingredients	secret	to 100%

SECTION 4 – FIRST AID MEASURES

General Information:

If poisoning occurs, contact a doctor or Poisons Information Centre, Phone Australia 131 126.

Inhalation	Remove to fresh air until recovered. If symptoms persist, seek medical advice.
Skin contact	Remove contaminated clothing and launder before use. Wash affected areas or skin thoroughly with soap and water. Seek medical advice if irritation develops.
Eye contact	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. Seek immediate medical attention.
Ingestion	If swallowed, DO NOT induce vomiting. Seek medical advice or contact Poisons Information Centre (Ph 13 11 26). Make every effort to prevent vomit from entering the lungs by careful placement of the patient.

Advice to Doctor:

Treat symptomatically.

SECTION 5 – FIRE FIGHTING MEASURES

Fire/Explosion Hazard

Dangerous Decomposition or Combustion Products

Thermal Decomposition

There is no risk of an explosion from this product under normal circumstances if it is involved in a fire. This product, if scattered, may form flammable or explosive dust clouds in air.

Poisons Information Centre: 13 1126 from anywhere in Australia

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

Extinguishing Media

Water fog, foam, carbon dioxide or dry chemical.

Fire Fighting

If a significant quantity of this product is involved in a fire, call the fire brigade. There is little danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is liquid-tight chemical protective clothing and breathing apparatus. If involved in a fire, it will emit oxides of nitrogen and carbon, hydrogen chloride and possibly thiophosgene.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spills & Disposal

In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective clothing including eye/face protection.

Product spill: Sweep granules and shovel or collect recoverable product into labeled containers for recycling or salvage, and dispose of promptly.

Wash the spill area with detergent and water. Launder protective clothing before storage or re-use.

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

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**.

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.

Engineering Controls

Handle in well ventilated areas. Controls should be sufficient so that applicable occupational exposure limits are not exceeded.

Personal Protective Equipment

When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield or goggles.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form:	Granule
Colour:	Pale beige
Odour:	Faint characteristic
Vapour Pressure:	<1.3 mPa @ 25°C for captan
Melting Point:	175 - 178°C for captan
Solubility:	Dispersible

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability

Stable under normal conditions. Hydrolyses at pH >7.

Hazardous Reaction

Keep away from strong oxidising agents.

Hazardous Polymerization

Hazardous polymerisation is not possible.

Conditions to Avoid

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

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute Toxicity – Oral

LD₅₀ (rat) 9,000 mg/kg for captan

Acute Toxicity – Dermal

LD₅₀ (rabbit) >4,500 mg/kg for captan

Acute Toxicity – Inhalation

LC₅₀ (rat) 0.668 mg/

Potential Health Effects

Health Effects

Acute:

- Inhalation:** Breathing in high concentrations of dusts or aerosols of this material may cause headache, nausea, dizziness and weakness.
- Skin contact:** Prolonged contact with the concentrate may result in absorption of captan in harmful amounts. May cause sensitisation by prolonged skin contact. Repeated or prolonged contact with the concentrate may lead to irritant contact dermatitis.
- Eye contact:** The concentrate may cause irritation of the eyes.
- Indigestion:** Possible symptoms of exposure include: nausea, vomiting and gastrointestinal discomfort and diarrhoea.
- Carcinogenicity:** Worksafe Australia has classified captan in the occupational environment as a Carcinogen Category 3 substance. This means that the substance is not classifiable as to carcinogenicity to humans. IARC (International Agency for Research on Cancer) has determined that the mechanism in rats and mice is unlikely to occur in humans; hence captan has been classified by IARC as Cat 3, not classifiable as to carcinogenicity to humans.
The US EPA considers captan not likely to be a human carcinogen at levels that do not cause cytotoxicity and regenerative cell hyperplasia, therefore not likely to be a human carcinogen or pose cancer risks of concern when used in accordance with approved product labels.

Chronic toxicity

Rats fed up to 750 mg/kg/day of 80% Captan for 4 weeks had decreased food intake and body weights. No deaths occurred in pigs given as much as 420 to 4000 mg/kg/day in the diet for 12 to 25 weeks, however, cattle given six doses of 250 mg/kg experienced varied toxic effects, including death.

Reproductive effects

Pregnant mice exposed by inhalation to high doses of Captan for 4 hours a day during days 6 to 15 of gestation showed significant mortality or weight loss. Foetal mortality accompanied these effects. Mice fed 50 mg/kg/day over three generations reproduced normally. Captan is unlikely to cause reproductive effects in humans at usual levels of exposure.

Teratogenic effects

Teratogenicity studies with rats, rabbits, hamsters, and dogs have given both negative and positive results. However, the weight of evidence suggests that Captan does not produce birth defects.

Mutagenic effects

Although Captan was mutagenic in some laboratory tests on isolated tissue cultures, the majority of evidence indicates that Captan is nonmutagenic.

Carcinogenic effects

There is strong evidence that Captan causes cancer in female mice and in male rats at high doses. In addition, Captan is chemically similar to two other pesticides, Folpet and Captafol, that have been shown to produce cancer in test animals. Tumours were associated with the gastrointestinal

tract and, to a lesser degree, with the kidneys. Tumours appeared in the test animals at doses of about 300 mg/kg/day.

Organ toxicity

Most organ-specific effects are found in the kidneys of rats at and above doses of 100 mg/kg/day.

Fate in humans and animals

Studies in several animal species have shown that Captan is rapidly absorbed from the gastrointestinal tract and is rapidly metabolized. Residues are excreted primarily in the urine. Rats given Captan orally excreted a third in the faeces and half in the urine within 24 hours. A cow fed small amounts in its diet for 4 days had no Captan in the milk at a 0.01 mg/L detection limit, nor could any be detected in the urine at a 0.1 mg/L detection limit.

There is no data to hand indicating any particular target organs.

Captan is classed by SWA as a potential sensitiser by skin contact.

Other Information

The ADI for Captan is set at 0.1mg/kg/day. The corresponding NOEL is set at 10mg/kg/day.

ADI: Acceptable Daily Intake; NOEL: No Observable Effect Level. Data adopted from Australia ADI List, December 2023.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity data

Acute Toxicity – Fish

The following is data for the active ingredient, captan.

LC₅₀ (96 hr) for bluegill sunfish is 0.072 mg/l.

LC₅₀ (96 hr) for brook trout is 0.034 mg/l.

Acute Toxicity - Daphnia

LC₅₀ (48 hr) for daphnia is 7 - 10 mg/l for captan.

Acute Toxicity - Other Organisms

Bees: Not toxic to bees. LD₅₀ 91 µg/bee.

Birds: Not toxic to birds. LD₅₀ for mallard ducks and pheasants is >5,000 mg/kg

LD₅₀ for bobwhite quail is 2,000 - 4,000 mg/kg

Persistence /Degradability

Captan has a low persistence in soil, with a half-life of 1 to 10 days in most soil environments. Captan was not detected in field studies of its mobility at application rates of up to 42 kg active ingredient per hectare.

Known Harmful Effects on the Environment

The active ingredient captan is highly toxic to fish and aquatic organisms.

Environ. Protection

Marine pollutant.

Spray drift should be avoided, read the label for more information.

Other Precautions

Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.

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: 3077
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains CAPTAN)
Class: 9
Packaging group: III
Hazchem: 2Z
Storage and Transport: Considered non dangerous for road and rail transport (in packaging) by the Australian Code for the Transport of Dangerous Goods by Road and Rail. Ref: ADG7; SP No. AU01.

IMO-IMDG

UN Number: 3077
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains CAPTAN)
Class: 9
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
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 0428 776 327
 Ask for Russell Clark