

SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name: Kenso Agcare Rebuke 430 SC Fungicide
Product Type: Group C Fungicide
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: A pre-emergence fungicide for the control of various diseases of bananas, peanuts, cereal crops, vegetables and other crops as specified in the Directions for Use table.

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



GHS Signal Word: **WARNING**

Hazard statement: H302: Harmful if swallowed.
H361: Suspected of damaging fertility or the unborn child.
H411: Toxic to aquatic life with long lasting effects.

Prevention: P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P264: Wash hands, arms and face thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P273: Avoid release to the environment.
P281: Use personal protective equipment as required.

Response: P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P308+P313: If exposed or concerned: Get medical advice.
P330: Rinse mouth.
P391: Collect spillage.

Storage: P405: Store locked up.

Disposal: P403 + P235: Store in a well-ventilated place. Keep cool.

SUSMP Classification: P501: Dispose of contents and containers as specified on the registered label.
S5

ADG Classification: Not a dangerous good.
UN Number: N/A

Emergency Overview

Physical Description & colour: Off-white suspension.

Odour: Negligible.

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

Potential Health Effects

Inhalation:

Short term exposure: Significant inhalation exposure is considered to be unlikely. Available data indicates that this product is not harmful. In addition product is unlikely to cause any discomfort or irritation.

Long Term exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short term exposure: Available data indicates that this product is not harmful. It should present no hazards in normal use. However product may be mildly irritating, but is unlikely to cause anything more than mild discomfort which should disappear once contact ceases.

Long Term exposure: No data for health effects associated with long term skin exposure.

Eye Contact:

Short term exposure: Exposure via eyes is considered to be unlikely. This product may be irritating to eyes, but is unlikely to cause anything more than mild transient discomfort.

Long Term exposure: No data for health effects associated with long term eye exposure.

Ingestion:

Short term exposure: Significant oral exposure is considered to be unlikely. Available data shows that this product is harmful, but symptoms are not available. This product is unlikely to cause any irritation problems in the short or long term.

Long Term exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:

NOHSC: No significant ingredient is classified as carcinogenic by NOHSC.

NTP: No significant ingredient is classified as carcinogenic by NTP.

IARC: No significant ingredient is classified as carcinogenic by IARC.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
Tebuconazole	107534-96-3	43%w/v
Inert ingredients	secret	to 100%w/v

SECTION 4 – FIRST AID MEASURES

Ingestion:	If swallowed, do not induce vomiting, seek medical advice immediately. Wash mouth thoroughly with water and contact a Poisons Information.
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Skin:	Wash gently and thoroughly with warm water (use non-abrasive soap if necessary) for 10-20 minutes or until product is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands and belts) and decontaminate them before reuse or discard.
Eyes:	Flush eyes immediately with plenty of fresh water for at least 20 minutes or until the product is removed, while holding the eyelids open. However, if irritation persists, see a doctor. Take special care if exposed person is wearing contact lens.
Inhaled:	Remove to fresh air until recovered. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on doctor's advice. DO NOT allow victim to move about unnecessarily. Symptoms of pulmonary oedema can be delayed up to 48 hours after exposure.

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 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.

Fire Fighting

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

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear overalls, goggles and gloves. Suitable materials for protective clothing include rubber, PVC. Eye/face protective equipment should comprise as a minimum, protective glasses and, preferably, goggles. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, we recommend that you use a respirator. Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above.

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. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this MSDS and the label, instructions on the label prevail. 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 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

Exposure Limits TWA (mg/m3) STEL (mg/m3)

Exposure limits have not been established by SWA for any of the significant ingredients in this product. The ADI for Tebuconazole is set at 0.01mg/kg/day. The corresponding NOEL is set at 1.5mg/kg/day. ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. Values taken from Australian ADI List, Dec 2003.

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: No special ventilation requirements are normally necessary for this product. However 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 is recommended when this product is being used.

Skin Protection: The information at hand indicates that this product is not harmful and that normally no special skin protection is necessary. However, we suggest that you routinely avoid contact with all chemical products and that you wear suitable gloves (preferably elbow-length) when handling this product.

Protective Material Types: We suggest that protective clothing be made from the following materials: rubber, PVC.

Respirator: Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form:	Suspension liquid
Colour:	Off-white
Odour:	Negligible
Boiling Point (°C):	N/A
Freezing/Melting Point:	N/A

Volatiles:	Water component
Volatility:	N/A
Specific Gravity:	1.12
Vapour Pressure:	1.7×10^{-3} mPa at 20 °C (water vapour pressure)
Vapour Density:	N/A
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

None known.

Incompatibilities

No particular incompatibilities.

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. Hydrogen fluoride gas and other compounds of fluorine. 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.

Polymerisation

This product is unlikely to undergo polymerisation processes.

SECTION 11 – TOXICOLOGICAL INFORMATION

Toxicity data (On Tebuconazole technical)

Acute Toxicity – Oral

LD₅₀ (rat): 1700mg/kg

LD₅₀ (mouse): 3000mg/kg

Acute Toxicity – Dermal

LD₅₀ (rat): = >5000mg/kg

Acute Toxicity – Inhalation

LC₅₀ (rat): 0.37mg/L/4hr

SECTION 12 – ECOLOGICAL INFORMATION

Toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment.

Tebuconazole:

Birds

LD₅₀ Male Japanese quail: 4438mg/kg

LD₅₀ Female Japanese quail: 2912mg/kg

LD₅₀ bobwhite quail: 1988mg/kg

Fish

LC₅₀ rainbow trout: 6.4mg/L

LC₅₀ golden orfe: 8.7mg/L

Algae

EC₅₀ 4.01mg/L

Daphnia

EC₅₀ 11.5mg/L

Worms:

LD₅₀ (*Eisenia foetida*) 1.381mg/kg

Environmental fate:

Animals

After three days, elimination is almost complete. Tebuconazole is excreted in urine and faeces.

Plants

In plant tissues, a mean half life of 12 days has been established.

Soil/Environment

Degrades slowly in soil studies conducted in the laboratory. Under field conditions, the compound degraded much more rapidly and did not accumulate in long term (3-5 year) studies. Since no residues could be detected in deeper soil layers of these and other studies, and adsorption/desorption studies indicate low mobility in soil, groundwater contamination through leaching can be excluded. In natural waters, hydrolysis and indirect photolysis occur; in a pond study, the compound dissipated from the water body with a DT50 of 11-3 weeks. Low vapour pressure and strong adsorption result in low volatilisation into the air.

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

UN Number:	None allocated
Proper Shipping Name:	None Allocated
ADG Class:	None allocated. Not a dangerous good.
Hazchem Code:	None allocated.
Packing Group:	None allocated.

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