

SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name: Rebuke 430 Fungicide
Company Name: Kenso Corporation (M) Sdn Bhd
Address: Office A, 49B, Apollo Drive, Rosedale, Auckland 063 NZ
Telephone Number: (09) 410 0861
Emergency Telephone Number: (24 Hours) 0800 734 607
National Poisons & Hazchem Information Centre : 0800 POISON (0800 764 766)
Use: Systemic fungicide for control of diseases in wheat, barley, oats, ryegrass seed crops, peas and onions.

SECTION 2 – HAZARDS IDENTIFICATION

Hazard classification: 6.1E, 6.4A, 6.9B, 9.1A
Priority Identifier: HARMFUL
KEEP OUT OF REACH OF CHILDREN
Secondary Identifiers: 6.1E = Acute toxicant
6.4A = Irritating to eyes
6.9B = Danger of serious damage to health by prolonged exposure
9.1A = Very toxic to aquatic organisms

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

Swallowed	If swallowed, do not induce vomiting; seek medical advice immediately.
Eye	Remove contaminated clothing, wash skin with plenty of soap and water. See a doctor if any signs or symptoms described in this document occur. Discard contaminated non-waterproof shoes and boots. Wash contaminated clothing before re-wearing.
Skin	Flush eyes immediately with plenty of fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. However, if irritation persists, see a doctor.
Inhaled	Remove to fresh air until recovered. See a doctor if discomfort or irritation continues.

Advice to Doctor
Treat symptomatically.

SECTION 5 – FIRE FIGHTING MEASURES

Fire and Explosion Hazards:

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.

Flash point: Non flammable
Upper Flammability Limit: Does not burn.
Lower Flammability Limit: Does not burn.
Autoignition temperature: Does not burn.
Flammability Class: Does not burn.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spills and Disposal

Contain spill and absorb with sand or proprietary absorbent (vermiculite). Prevent from entering drains, waterways or sewers. Collect in sealed open top containers for disposal. The product is an herbicide and spills should be contained. The product is relatively toxic to fish and hence should be kept from entering water bodies. Triple rinse containers, add rinsate to the spray tank, then offer container for recycling/reconditioning, or puncture top, sides and bottom and dispose off in landfill in accordance with local regulations. On-site disposal off concentrate is not acceptable.

SECTION 7 – HANDLING AND STORAGE

Store in the original container, tightly closed, away from food, seeds, fertilisers and pesticides. Keep out of reach of children. After handling, remove protective clothing and equipment, wash hands before eating, drinking, chewing gum, smoking or using toilet. See product label for further handling and storage precautions.

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.

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:	liquid
Colour:	white to beige
Odour:	Negligible
Boiling point (°C):	NA
Vapour Pressure:	NA
Flashpoint:	NA

Flammability Limits: Non-flammable
Specific Density: 1.12 ± 0.01
Water Solubility: Miscible with water

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions.
Hazardous Polymerization: Hazardous polymerisation is not possible.

SECTION 11 – TOXICOLOGICAL INFORMATION

Toxicity: Tebuconazole: LD₅₀ Oral, Rat 1700mg/kg
LD₅₀ Dermal, Rat = >5000mg/kg
LD₅₀ Oral, Mouse = 3000mg/kg
LC₅₀ Inhalation, 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 bobwhite quail: 1988mg/kg
LD₅₀ Female Japanese quail: 2912mg/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 (Sea Transport): 3082

IMO Proper Shipping: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains TEBUCONAZOLE), Class 9, Packing Group III.

SECTION 15 – REGULATORY INFORMATION

HSNO Approval Number: HSR000751
HSNO Controls (inc. Tracking and Record Keeping):
See <http://www.epa.govt.nz> for controls.
ACVM Registration: P8771
ACVM Controls:
See www.footsafety.govt.nz for registration conditions.

SECTION 16 – OTHER INFORMATION

This MSDS contains only safety-related information. For other data see product literature.

CONTACT POINT:

Police and Fire Service:

Dial 111

**National Poisons & Hazchem
Information Centre:**

Dial **0800 POISON (0800 764 766)**