

MATERIAL SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name: Kenso Agcare Vega 250 EC 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: For the control of target spot of potatoes and tomatoes, leaf blight of carrots, leaf spot diseases of bananas and husk spot on Macadamias.

SECTION 2 – HAZARDS IDENTIFICATION

Hazard Classification: Hazardous according to criteria of Worksafe Australia.
Risk Phrase(s): R20/22 Harmful through inhalation, and if swallowed.
R36 Irritating to eyes.
R40 Harmful: possible risk of irreversible effects.
R43 May cause sensitization by skin contact.
Safety Phrase(s): S2 Keep out of reach of children.
S20 When using, do not eat and drink.
S25 Avoid contact with eyes.
S28 After contact with skin, wash immediately with plenty of water.
S38 In case of insufficient ventilation, wear suitable respiratory equipment.
S46 If swallowed, contact a doctor or Poisons Information Centre immediately and show this container or label.
S36/37 Wear suitable protective clothing and gloves.
SUSDP Classification: S5
ADG Classification: None allocated. Not a dangerous good.
UN Number: None allocated.

Emergency Overview

Physical Description & colour: Clear amber liquid
Odour: Non specific
Major Health Hazards: No major health hazard is known.

Potential Health Effects

Health Effects

Swallowed: Harmful if swallowed.
Eye: May irritate eyes.
Skin: May irritate skin.
Inhalation: May be harmful if inhaled.

Chronic:

Difenoconazole technical has been extensively tested on mammals and in test-tube systems. No evidence of mutagenic, teratogenic or reproductive effects was obtained. Chronic 2-year feeding studies revealed no compound-related tumourigenic effects in rats, whereas in mice high doses were associated with an increased incidence of liver tumours.

The absence of mutagenic effects and the pronounced restriction of tumour appearance to one organ and one species suggests an underlying promotion process which is frequently seen in mice and which is considered to have no bearing in humans.

Repeated high doses of difenoconazole technical were associated with cataracts in dogs and hens. Studies on other species and a subsequent dog study did not confirm this effect. Other effects at high doses included liver toxicity and adverse effects on blood cells and platelets.

The **aromatic petroleum hydrocarbon liquid** may cause central nervous system depression and narcosis.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
Difenoconazole	119446-68-3	271 g/L
Stabilisers and surfactant		balance

SECTION 4 – FIRST AID MEASURES

Swallowed	If swallowed DO NOT induce vomiting. Give a glass of water immediately and induce vomiting. Seek medical advice..
Eye	Hold eyes open, flood with water for at least 15 minutes. Seek medical advice.
Skin	Carefully remove contaminated clothing and wash affected skin thoroughly with soap and water.
Inhaled	Remove affected persons into fresh air and keep warm and at rest.

Advice to Doctor

No specific antidote is available. If poisoning is suspected apply symptomatic therapy.

SECTION 5 – FIRE FIGHTING MEASURES

Fire/Explosion Hazard

This product is non-flammable and non-explosive. Product is combustible. Extinguish warehouse and factory fires using fine-water spray or foam. During a fire this product may release smoke and hazardous decomposition products. When fighting a major fire wear an air-supplied respirator.

Dangerous decomposition or Combustion Products

Thermal decomposition

None

Hazardous decomposition products

Can decompose at high temperatures forming toxic gases.

Extinguishing Media

Use foam, extinguishing powder, carbon dioxide

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spills and Disposal

Shovel or sweep into drums. Dispose off in an approved land-fill. Wash contaminated surfaces with detergent and water. Do not allow spills to contaminate rivers, dams or other waterways.

SECTION 7 – HANDLING AND STORAGE

Storage

Store in tightly sealed original containers in a dry secure place away from fertilisers, seed, feed and food. Store out of direct sunlight. Keep out of reach of children, unauthorised persons and animals.

Transport

Considered non-hazardous by Australian Code for the Transport of Dangerous Goods by Road and Rail.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards:

No exposure standards have been set for the components of this product. The manufacturer of the liquid aromatic hydrocarbon solvent recommends an occupational exposure limit of 100 mg/L of air (8 hour time-weighted average).

Exposure Potential - Swallowing is unlikely under normal conditions of usage. Skin uptake and inhalation of spray mist are possible routes of exposure. This product is diluted with water prior to use as a spray. This diluted form is less toxic by all exposure routes.

Re-entry Period - Do not enter treated areas without protective clothing until spray has dried.

Engineering Controls:

No special requirements. Product is used outdoors.

Personal Protection:

Eyes: Wear goggles.
Clothing: Wear cotton overalls buttoned to the neck and wrist and a washable hat.
Gloves: Wear elbow-length butyl rubber gloves.
Respiratory: Wear a disposable mask if inhalation is likely.

If product gets in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves and face shield or goggles and contaminated clothing.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Colour:	Clear amber
Odour:	Non-specific
Boiling point (°C):	Not applicable
Vapour Pressure:	Not applicable
Specific gravity:	1.02 at 20°C
Flashpoint:	66- 67°C (closed cup)
Flammability Limits:	Non flammable
Solubility in Water:	Miscible with water

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability:	This product is stable under normal storage conditions.
Conditions to Avoid:	Avoid extreme heat.
Incompatibilities:	Avoid strong oxidising agents.
Hazardous Polymerization:	Hazardous polymerization is not possible.

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute:

Toxicity- This product is slightly hazardous (WHO Hazard Class III)

Swallowed:	Low toxicity Test on rats indicate a low toxicity following single doses of the undiluted product. (LD ₅₀ > 3442 mg/kg)
Dermal absorption:	Low toxicity Test on rats indicate a low toxicity due to skin contact with the undiluted product. (LD ₅₀ > 2000 mg/kg)
Inhaled:	Low toxicity Test on rats indicate a low toxicity due to inhalation of the undiluted product. (LC ₅₀ (4 h) > 5400 mg/m ³)
Irritation:	
Eye:	Moderate irritant
Skin:	Moderate irritant
Sensitisation- (based on results of difenoconazole technical on guinea pigs)	
Skin:	NOT A SENSITISER
The sensitising potential of the hydrocarbon liquid is not known.	

SECTION 12 – ECOLOGICAL INFORMATION

Known Harmful Effects on the Environment

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Other Precautions

Environ. Protection

DO NOT contaminate streams, rivers or waterways with the product or used containers.

Persistence / Degradability

Difenoconazole is degraded in soil after use as a seed treatment with a half-life of 35-63 days; primarily due to microbial degradation. Hydrolysis and photolysis are not significant pathways for environmental degradation. Difenoconazole is slowly degraded in water. The aquatic degradation half life is 307-324 days, but the compound is readily adsorbed onto sediment, leading to rapid disappearance in natural water. Difenoconazole has a low to moderate mobility in soil and a moderate bioaccumulation potential.

Difenoconazole is practically non-toxic to birds and bees.

Acute Toxicity - Fish

LC₅₀: 0.81 mg/L (96 h); rainbow trout
1.20 mg/L; bluegill

Acute Toxicity - Worms

LD₅₀: >610 mg/L soil; earthworm

Acute Toxicity - Algae

EC₅₀: 1.20 mg/L; algae

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
SUSDP Classification: S5
ADG Class: None allocated. Not a dangerous good.
Hazchem Code: None allocated.
Packing Group: None allocated.

SECTION 15 – REGULATORY INFORMATION

SUSDP Classification 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