SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name:	**Kenso Agcare Vega 250 EC Fungicide**
Product Type:	Group 3 Fungicide
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:	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: 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:
Flammable liquids – Category 4
Acute toxicity (Oral) – Category 4
Aspiration hazard – Category 1
Serious eye damage/eye irritation – Category 2/2A
Hazardous to the aquatic environment, long-term – Chronic 1

GHS Signal Word: **DANGER**

Hazard statements:
H227: Combustible liquid.
H302: Harmful if swallowed.
H304: May be fatal if swallowed and enters airways.
H319: Causes serious eye irritation.
H410: Very toxic to aquatic life with long lasting effects.

Prevention:
P210: Keep away from heat/sparks/open flames/hot surfaces and other ignition sources. No smoking.
P264: Wash contacted areas thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P273: Avoid release to the environment.
P280: Wear protective gloves, protective clothing and eye or face protection.

Response:
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

	P330: Rinse mouth. P331: Do NOT induce vomiting. P337+P313: If eye irritation persists: Get medical advice/attention. P370+P378: In case of fire: Use water fog, foam, dry agent (carbon dioxide, dry chemical powder) to extinguish. P391: Collect spillage.
Storage:	P403: Store in a well-ventilated place. P405: Store locked up.
Disposal:	P501: Dispose of contents and containers as specified on the registered label.
SUSMP Classification:	S5
ADG Classification:	N/A
UN Number:	N/A

Emergency Overview

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

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS number	Proportion
Difenoconazole	119446-68-3	25%
Inert ingredients	secret	<15%
Liquid hydrocarbon		to 100%

SECTION 4 – FIRST AID MEASURES

Inhalation:	Remove affected persons into fresh air and keep warm and at rest.
Skin contact:	Carefully remove contaminated clothing and wash affected skin thoroughly with soap and water.
Eye contact:	Hold eyes open, flood with water for at least 15 minutes. Seek medical advice.
Ingestion:	If swallowed, do NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Information Centre on 13 11 26 (Australia). Make every effort to prevent vomit from entering the lungs by careful placement of the patient. Give a glass of water.

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

SECTION 5 – FIRE FIGHTING MEASURES

Specific Hazard
Product is a combustible liquid, (C1)
Fire/Explosion Hazard

Dangerous Decomposition or Combustion Products
Thermal Decomposition 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

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

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 20ºC
Flashpoint:	61ºC
Flammability:	Combustible liquid, (C1)
Solubility:	Emulsify 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.

Potential Health Effects

Health Effects

Inhalation: May be harmful if inhaled.

Skin contact: May irritate skin.

Eye contact: May irritate eyes.

Ingestion: Harmful if swallowed.

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.
Other information
The ADI for difenoconazole is set at 0.01 mg/kg/day with corresponding NOEL is set at 1.0 mg/kg/day. **ADI= Acceptable Daily Intake; NOEL: No Observable Effect Level. Data adopted from Australia ADI List, June 2023.*

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.
Difenoconazole is practically non-toxic to birds and bees.
Acute Toxicity - Fish
LC_{50}: 0.81 mg/L (96 h); rainbow trout
LC_{50}: 1.20 mg/L; bluegill
Acute Toxicity - Worms
LD_{50}: >610 mg/L soil; earthworm
Acute Toxicity - Algae

EC_{50}: 1.20 mg/L; algae

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.

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:	3082
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains DIFENOCONAZOLE)
Class:	9
Packaging group:	III
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:	3082
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains DIFENOCONAZOLE)
Class:	9
Packaging group:	III
Marine pollutant:	Yes

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
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	0439 933 556 Ask for Murray Goodlich