SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name:	**Avior 250 SC Fungicide**
Company Name:	Kenso Corporation (M) Sdn Bhd
Address:	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:	For the control of a wide range of diseases in Wheat, Barley, Potatoes, Ryegrass seed crops, Sweetcorn and Maize

SECTION 2 – HAZARDS IDENTIFICATION

Hazard classification: 6.1D, 6.9B, 8.3A, 9.1B
Priority Identifier: WARNING
KEEP OUT OF REACH OF CHILDREN
Secondary Identifiers: 6.1D = Harmful if swallowed
6.9B = Danger of serious damage to health by prolonged exposure
8.3A = Eye corrosive
9.1B = Toxic to aquatic organisms

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	**CAS number**	**Proportion**
Azoxystrobin	131860-33-8	25 % w/v
Inert ingredients	secret	To 100 % w/v

SECTION 4 – FIRST AID MEASURES

Swallowed	If swallowed DO NOT induce vomiting.
Eye	If concentrate or spray solution enters the eyes wash it out immediately with water. Remove contact lenses.
Skin	If skin contact occurs remove contaminated clothing and wash affected areas thoroughly with running water.
Inhaled	If inhaled move the victim to fresh air immediately.

Advice to Doctor
Treat symptomatically.

SECTION 5 – FIRE FIGHTING MEASURES

Type of Hazard This product contains combustible organic components.

Fire Hazard Properties As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion. Exposure to decomposition products may be a hazard to health.

Regulatory Requirements Not applicable

Extinguishing media and methods
Extinguishing media-small fires:
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Extinguishing media-large fires:
Alcohol resistant foam or water spray
DO NOT use a solid water stream as it may scatter and spread fire.

Hazchem Code
2X

Recommended Protective Clothing
When fighting a major fire wear an air-supplied respirator. Wear full protective equipment.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Emergency Procedures:

Personal Precautions: Ensure suitable personal protection during removal of spillages. This means wearing eye protection, chemically resistant gloves, boots and overalls.

Environmental Precautions: Washings must be prevented from entering surface water drains or waterways.

Procedure for spill:
(1) Keep all bystanders away.
(2) Wear eye protection, respiratory protection (at least to organic vapour standard), full length chemical resistant clothing and Nitrile/PVC gloves.
(3) Reposition any leaking containers so as to minimise further leakage.
(4) Dam and absorb spill with an absorbent material (e.g. sand or soil).
(5) Shovel the absorbed spill into drums.
(6) Decontaminate the spill area with detergent and water and rinse with the smallest volume of water practicable.

Procedure for Disposal: Disposal of the absorbed material will depend upon the extent of the spill. Contaminated material must be disposed of in accordance with all local authority requirements.
It is suggested:

- For quantities up to 50 litres of product bury in a secure approved landfill site.
- For quantities greater than 50 litres seek advice from the manufacturer (use emergency contact number below) before attempting disposal. Contain in a secure location until disposal method is established.

SECTION 7 – HANDLING AND STORAGE

Handling:

Precautions for safe handling: No special technical protective measures required. No special handling advice required.

Regulatory Requirements: not required.

Handling practices: Avoid contact with skin and eyes and inhalation of concentrate or spray mist. When using, do not eat, drink or smoke. Wash face and hands before eating, drinking or smoking.

Approved Handlers: Approved Handlers not required for this product.

Storage:

Conditions for Safe Storage: Keep out of reach of children. Store in original container, tightly closed, away from foodstuffs. Store in a cool, dry, well ventilated place and protect from sunlight. Avoid temperatures below -5℃ or above 35℃.

Store Site Requirements: Signage and secondary containment will be required at sites holding more than 1000 litres of any product classified as 9.1B.

Packaging: Store in original container, tightly closed, away from foodstuffs.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Workplace Exposure Guidelines:

Workplace Exposure Standards: Azoxystrobin
8 h TWA: 2 mg/m3
(Source: Syngenta)
Propane-1,2-diol
8 h TWA: 10 mg/m3 (Particulates)
8 h TWA: 470 mg/m3 (Total [vapour & particulates])
(Source: UK HSE)

Application in the workplace: not applicable

Exposure standards outside the workplace: none set

Engineering controls: No special requirements. Product is used outdoors. Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. If airborne mists or vapors are generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit. Follow precaution statements on the label and the use and safety directions in Code of Practice for the Management of agrichemical NZS8409.

Personal Protection: Use only protective equipment bearing the mark of the Standards Association of Australia/ New Zealand. In case of heavy exposure, wear full respiratory protection (at least to organic vapour standard) eye protection, chemical resistant coveralls and gloves.

General Hygiene: Change work clothes daily. May irritate the eyes and skin. Avoid contact with eyes and skin. Do not inhale spray mist. If product gets on skin immediately wash area with soap and water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form:	liquid
Colour:	Beige to light brown
Odour:	Non specific
pH:	5-8
Flash point (°C):	NA
Flammability Limits:	Not highly flammable
Density:	1.090 g/cm^3 at 20℃
Miscibility:	Miscible
Oxidising properties:	Not oxidising

Explosive properties: Not explosive

SECTION 10 – STABILITY AND REACTIVITY

Stability of the Substance:	Stable under normal conditions.
Conditions to Avoid:	None known
Material to Avoid:	None known
Hazardous decomposition products	Combustion or thermal decomposition will evolve toxic and irritant vapours.
Hazardous polymerisation	Hazardous polymerisation does not occur.
Specific Data	not applicable

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute Effect (Undiluted product)

Acute Toxicity – Oral	LD_{50} (rats) : >2000 mg/kg
Acute Toxicity – Dermal	LD_{50} (rats) : >2000 mg/kg
Acute Toxicity – Inhalation	LC_{50} (rats) (4hr) : >6.32 mg/l
Irritation-Eye	**IRRITANT** (rabbit/HSNO classification)
Irritation-Skin	**NON-IRRITANT** (rabbit/HSNO classification)
Sensitization	**NOT A SENSITISER** (guinea pigs)

Chronic/ Long Term Effects (Active Ingredient)

Azoxystrobin technical has been extensively tested on laboratory mammals and in test-tube systems. Did not show carcinogenic, teratogenic or mutagenic effects in animal experiments.

SECTION 12 – ECOLOGICAL INFORMATION

Environmental Risk and Safety Phrases

Avoid contamination of any water supply with chemical or empty container

Ecotoxicity Effects

Acute toxicity to Birds:	LD_{50} = >2000mg/kg (mallard ducks and bobwhite quail)
Acute toxicity to Fish:	LC_{50} (96 h) = 1.2mg/L (Oncorhynchus mykiss[Rainbow trout]) LC_{50} (96 h) = 2.8mg/L (Cyprinus carpio [carp])
Growth inhibition, Algae:	ErC_{50} (72 h) = 2.2mg/L (Pseudokirchneriella subcapitata (green algae) ErC_{50} = 0.71 mg/L (Pseudokirchneriella subcapitata (green algae)
Toxicity to aquatic Invertebrates:	LC_{50} (48 h) = 0.83 mg/L (Daphnia magna (water flea)
Toxicity to soil dwelling organisms:	LC_{50} (14 days) = 283 mg/kg (Earthworms)
Toxicity to honey bees:	LD_{50} (14 days) >283ug/bee

Environmental Fate

Azoxystrobin has medium bioaccumulation potential.
Degradation half-life: >12 d at 25℃ in water. Stable in water.
Not persistent in soil; DT50 = 59.5 d. Low to very high mobility in soil. Kow log P = 2.5 (20℃).

SECTION 13 – DISPOSAL CONSIDERATIONS

Product Disposal: Dispose of this product only by using according to the label, or at an approved landfill or other approved facility.

Container Disposal: Ensure the container is empty. Triple rinse empty container and add rinsate to the spray tank. Recycle empty container through Agrecovery (0800 247 326, www.agrecovery.co.nz). Otherwise crush and bury in a suitable landfill. DO NOT reuse this container for any other purpose.

SECTION 14 – TRANSPORT INFORMATION

UN Number (Sea Transport): 3082

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

SECTION 15 – REGULATORY INFORMATION

HSNO Approval Number: HSR100907
HSNO Controls (inc. Tracking and Record Keeping):
See http://www.epa.govt.nz for controls.
ACVM Registration: P8909
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 Points:

Police, Ambulance and Fire Service:	Dial	111
National Poisons Information Centre:	Dial	0800 POISON (0800 764 766)
Hazardous Substances Emergency:	Dial	0800 Chemcall (0800 243 622)