



Sharda Cropchem

MATERIAL SAFETY DATA SHEET

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In Case of Emergency, call CANUTEC, 1(613) 996-6666, Open 24 hrs

SECTION – 1: PRODUCT IDENTIFICATION

Product Identifier: Azoshy 250 SC Fungicide

Registration Number: 32263 (Pest Control Products Act)

Active Ingredient (%): Azoxystrobin (250 g/L) CAS No.: 131860-33-8

Chemical Name: Methyl (αE)-2-[[6-(2-cyanophenoxy)-4-pyrimidinyl] oxy-α-(methoxymethylene)benzeneacetate

Product Use: A broad spectrum, suspension concentrate fungicide for control of a wide range of diseases in a variety of registered crops. For further details please refer to product label.

SECTION – 2 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Common Name	CAS Number	Average % by weight
Methyl (αE)-2-[[6-(2-cyanophenoxy)-4-pyrimidinyl] oxy-α-(methoxymethylene)benzeneacetate	Azoxystrobin	131860-33-8	22.9
Propane-1,2-diol	Propylene glycol	57-55-6	11

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

SECTION – 3: HAZARDS IDENTIFICATION

Hazard Classification(s): Aquatic Acute Toxicity – Category 1
Aquatic Chronic Toxicity – Category 1
Eye Irritation – Category 2B

Hazard Symbol(s):



Signal Word(s): Warning
Hazard Statement(s): H320 – Causes eye irritation.
H400 – Very toxic to aquatic life.



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	H410 – Very toxic to aquatic life with long lasting effects.
Precautionary Statement(s):	
Prevention:	P102 – Keep out of reach of children. P261 – Avoid breathing dust/fume/gas/mist/vapours/spray. P264 – Wash 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/eye protection/face protection.
Response:	P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 – If eye irritation persists: Get medical advice/attention. P391 – Collect spillage.
Storage:	P403+P233 – Store in a well-ventilated place. Keep container tightly closed.
Disposal:	P501 – Dispose of contents/container to an approved waste disposal plant.
Other Hazards Which do not Result in GHS Classification:	To avoid risks to human health and the environment, comply with the instructions before use. Contains 1,2-benziothiazol-3-one. May produce an allergic reaction.

SECTION – 4: FIRST AID MEASURES

IF POISONING IS SUSPECTED, immediately contact the poison information centre, doctor or nearest hospital. Have the product container, label or Material Safety Data Sheet with you when calling a poison control center or doctor, or going for treatment. Tell the person contacted the complete product name, and the type and amount of exposure. Describe any symptoms and follow the advice given.

EYE CONTACT:	Flush eyes with clean water, holding eyelids apart for a minimum of 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. Obtain medical attention immediately if irritation persists.
SKIN CONTACT:	Immediately remove contaminated clothing and wash skin, hair and fingernails thoroughly with soap and water. Flush skin with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.
INHALATION:	Move victim to fresh air. If not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control centre or doctor for treatment advice.
INGESTION:	If swallowed, immediately contact a poison control centre, doctor or nearest hospital for treatment advice. Have person sip a glass of water if able to do so. Do not give anything by mouth to an unconscious person. Do not induce vomiting unless directed by a physician or a poison control centre. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus, rinse mouth and administer water.

Most Important Symptoms/Effects, Acute and Delayed:

Causes mild eye irritation.



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Indication of Immediate Medical Attention and Special Treatment:

There is no specific antidote.
Treat symptomatically.

SECTION – 5: FIRE FIGHTING MEASURES

Suitable (and Unsuitable) Extinguishing Media: Use foam, carbon dioxide, dry powder, halon extinguishant or water fog or mist. Cool closed containers exposed to fire with water spray. Do not use a solid water stream as it may scatter and spread the fire.

Specific Hazards Arising from the Chemical: Can decompose at high temperatures forming toxic gases. During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

Special Protective Equipment and Precautions for Fire-Fighters: Wear full protective clothing and self-contained breathing apparatus. Evacuate non-essential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustions. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water run-off can cause environmental damage. Contain run-off water with, for example, temporary earth barriers.

SECTION – 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: Control the spill at its source. Clean up spills immediately, observing precautions outlined in Sections 7 and 8. Use adequate ventilation and equipment and wear clothing as described in Section 8 and/or the product label.

Environmental Precautions: Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Spillages or uncontrolled discharges into watercourses must be reported to the appropriate regulatory body.

Methods and Materials for Containment and Cleaning Up: Pump or scoop large amounts of liquid into a disposable container. Absorb remaining liquid or smaller spills with clay, sand or vermiculite. Scoop or seep up material and place into a disposal container. Wash area with detergent and water. Pick up wash liquid with additional absorbent and place into a compatible disposal container. On soils, small amounts will naturally decompose. For large amounts, skim off the upper contaminated layer and collect for disposal. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposal.

SECTION – 7: HANDLING AND STORAGE

Precautions for Safe Handling: KEEP OUT OF REACH OF CHILDREN. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Avoid breathing vapours, dust or spray mist. Wear full protective clothing and equipment (see Section 8). After work, rinse gloves and remove protective equipment, and wash hands thoroughly with soap and water after handling, and before eating, tobacco use, drinking, applying cosmetics or using the toilet. Wash contaminated clothing before re-use and separate from household laundry. Keep containers closed when not in use. Protect product, wash or rinse water, and contaminated materials from uncontrolled release into the environment, or from access by animals, birds or unauthorized people.

Conditions for Safe Storage, Including Any Incompatibilities: Store in original container in a well-ventilated, cool, dry, secure area. Protect from heat, sparks and flame. Do not expose sealed containers to temperatures above 40 °C. Refer to the product label for specific storage recommendations, including



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minimum storage temperature and freeze/thaw stability. Keep separate from other products to prevent cross contamination. Rotate stock. Clean up spilled material immediately.

SECTION – 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

CONSULT THE PRODUCT LABEL FOR COMMERCIAL AND/OR ON-FARM APPLICATIONS.

Control Parameters:

Component	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen	WHMIS†
Azoxystrobin	Not established	Not established	2 mg/m ³ TWA****	No	Not established
Propylene glycol	Not established	Not established	10 mg/m ³ TWA AIHA WEEL****; 10 mg/m ³ TLV (ON)	No	Yes

* Recommended by Manufacturer

** Recommended by NIOSH

*** Sharda Occupational Exposure Limit (OEL)

**** Recommended by AIHA (American Industrial Hygiene Association)

† Material listed in Ingredient Disclosure List under the Hazardous Products Act

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications. Sharda Hazard Category: B

Appropriate Engineering Controls: If necessary, ensure work areas have ventilation, containment, and procedures sufficient to maintain airborne levels below the TLV (threshold limit value). Warehouses, production areas, parking lots and waste holding facilities must have adequate containment to prevent environmental contamination. Provide separate shower and eating facilities.

Individual Protection Measures:

General: Avoid breathing dust, vapours or aerosols. Avoid contact with eye, skin and clothing. Wash thoroughly after handling and before eating, drinking, applying cosmetics or handling tobacco.

Ingestion: Do not eat, drink, handle tobacco, or apply cosmetics in areas where there is a potential for exposure to this material. Always wash thoroughly after handling.

Eyes: Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.

Skin: Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.

Inhalation: A particulate filter respirator may be necessary until effective engineering controls are installed to comply with occupational exposure limits. Use a NIOSH certified respirator with any N, R, P or HE filter. Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.



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SECTION – 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Off-white to yellow suspension.
Formulation Type: Suspension concentrate
Physical State: Liquid.
Odour: Not available.
Odour Threshold: Not available.
pH: 6-9 (1% in water)
Melting Point: Not applicable.
Freezing Point: Not available.
Initial Boiling Point and Boiling Range: Not available.
Flash Point: > 102°C (Pensky-Martens closed-cup).
Evaporation Rate: Not available.
Flammability (solid/gas): Not applicable.
Lower Explosive Limit: Not available.
Upper Explosive Limit: Not available.
Vapour Pressure: Azoxystrobin: 8.3 x 10⁻¹³ mmHg @ 20 °C.
Vapour Density: Not available.
Relative Density: 1.09 g/mL
Solubility(ies): Azoxystrobin: 6.7 mg/L @ 20 °C, pH 7 (water).
Partition Coefficient (n-octanol water): Azoxystrobin: 2.5
Auto-Ignition Temperature: Not available.
Decomposition Temperature: Not available.
Viscosity: 550-800 mPa(s).

Other Information: Not applicable.

SECTION – 10: STABILITY AND REACTIVITY

Reactivity: Not reactive.
Chemical Stability: Stable under normal use and storage conditions.
Possibility of Hazardous Reactions: Not applicable.
Conditions to Avoid: Not applicable.
Incompatible Materials: Not applicable.
Hazardous Decomposition Products: Can decompose at high temperatures forming toxic gases. During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

SECTION – 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Skin, eyes, mouth, lungs.
Symptoms of Acute Exposure: Causes mild eye irritation.
Potential Health Effects: Not applicable.

Acute Toxicity/Irritation Studies (Finished Product):



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Ingestion:	<u>Low Acute Toxicity</u> Oral (LD50 Rat)	> 5,000 mg/kg body weight (based on a substantially similar formulation)
Dermal:	<u>Low Acute Toxicity</u> Dermal (LD50 Rat)	> 4,000 mg/kg body weight (based on a substantially similar formulation)
Inhalation:	<u>Low Acute Toxicity</u> Inhalation (LC50 Rat)	> 6.23 mg/L air – 4 hours (based on a substantially similar formulation).
Eye Contact:	<u>Mildly Irritating (Rabbit)</u>	(based on a substantially similar formulation)
Skin Contact:	<u>Non-Irritating (Rabbit)</u>	(based on a substantially similar formulation)
Skin Sensitization:	<u>Non a Sensitizer (Guinea Pig)</u> (based on a substantially similar formulation)	

Specific Target Organ Toxicity (STOT) Single Exposure:

Azoxystrobin: Not classified as a specific target organ toxicant, single exposure.

Specific Target Organ Toxicity (STOT) Repeated Exposure:

Azoxystrobin: No adverse effect has been observed in chronic toxicity tests.

Carcinogenicity:

Azoxystrobin: Did not show carcinogenic effects in animal experiments.

Reproductive Toxicity:

Azoxystrobin: Did not show reproductive toxicity effects in animal experiments.

Mutagenicity:

Azoxystrobin: Did not show mutagenic effects in animal experiments.

Toxicity of Other Components:

The acute toxicity test results reported in Section 11, above, for the finished product take into account any acute hazards related to the “other components” in the formulation.

Propylene glycol: Reported to cause central nervous system depression (anesthesia, dizziness, confusion), headache and nausea. Also, eye irritation may occur with lacrimation but no residual discomfort or injury. Prolonged contact to skin may cause mild to moderate irritation and possible allergic reactions. Chronic dietary exposure caused kidney and liver injury in experimental animals.



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SECTION – 12: ECOLOGICAL INFORMATION

Eco-Acute Toxicity:

Azoxystrobin:

Invertebrates (Water Flea) LC50/EC50	0.280 ppm
Fish (Rainbow Trout) 96-hour LC50/EC50	0.47 ppm
Birds (5-day dietary – Mallard Duck) LC50/EC50	> 5,290 ppm

Persistence & Degradability:

Azoxystrobin: Moderately persistent in soil. Moderately persistent in water.

Bioaccumulation Potential:

Azoxystrobin: BCF < 500; does not bioaccumulate.

Mobility in Soil:

Azoxystrobin: Low to moderate mobility in soil.

Other Adverse Effects: Not applicable.

SECTION – 13: DISPOSAL CONSIDERATIONS

Waste Disposal Information: Do not reuse containers unless they are specifically designed to be refillable. Empty container retains product residue. Dispose of empty containers in accordance with local regulations. Consult provincial environment ministry for advice on waste disposal. Industrial/commercial waste may be handled at licensed facilities only. Waste shipments must be securely packaged and properly labelled. Only licensed carriers may be used, and proper documents must accompany the shipment.

SECTION – 14 : TRANSPORT INFORMATION

TDG Classification – Road/Rail:

Not regulated.

Land Transport (ADR/RID):

UN Number: UN3082

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, n.o.s. (Azoxystrobin)

Transport Hazard Class: 9

Packing Group: IIII

Environmental Hazards: Environmentally hazardous.

Water Transport – International (IMDG):

UN Number: UN3082

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, n.o.s. (Azoxystrobin)

Transport Hazard Class: 9

Packing Group: III

Environmental Hazards: Marine pollutant.



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Air Transport (IATA-DGR):

UN Number: UN3082

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, n.o.s. (Azoxystrobin)

Transport Hazard Class: 9

Packing Group: III

Environmental Hazards: Not applicable.

Special Precautions for User:

Not applicable.

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code:

Not applicable.

SECTION – 15: REGULATORY INFORMATION

Hazardous Products Act Information:

This product has been classified in accordance with the amended Hazardous Products Act and the Hazard Criteria of the Hazardous Products Regulations (HPR), and the SDS contains all the information required by the HPR.

Hazardous Products Act Information: WHMIS 2015 Classification

This product is exempt under WHMIS 2015.

Pest Control Products (PCP) Act Registration No.: 32263

SECTION – 16: OTHER INFORMATION

The information contained herein is offered only as a guide to the handling of this specific material and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive and the manner and conditions of use and handling may involve other and additional considerations. No warranty of any kind is given or implied and Sharda Cropchem Limited will not be liable for any damages, losses, injuries or consequential damages which may result from the use of or reliance on any information contained herein. This Material Safety Data Sheet is valid for three years. This product is under the jurisdiction of the Pest Control Products Act and is exempt from the requirements for a WHMIS compliant MSDS. Hazardous properties of all ingredients have been considered in the preparation of this MSDS. Read the entire MSDS for the complete hazard evaluation of this product.