

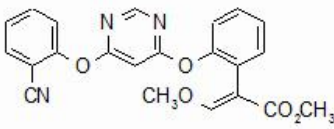
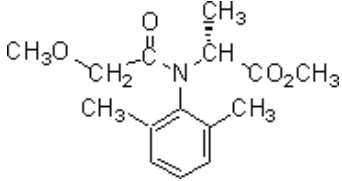


Material Safety Data Sheet (MSDS) Azoxam SC

IDENTIFICATION OF THE SUPPLIER:

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PRODUCT IDENTIFICATION:

Common name :	Azoxystrobin	Metalaxyl –M(mefenoxam)
Trade name	Azoxam	
Uses category	Fungicide	
Type of formulation	Suspension concentrate	
Chemical name	Methyl (E)-2-[2 [6-(2-cyanophenoxy)pyrimidin-4-ylloxy]phenyl]-3-methoxyacrylate.	(R,2)-2-[2,6-dimethylphenyl)-methoxyacetyl-amino]-propionic acid methyl ester
Chemical formula		
Molecular weight	403.4 g/mol	279.33

PRODUCT COMPOSITION:

<i>Active ingredient</i>	<i>% w/v</i>	<i>CAS#</i>
Azoxystrobin	32.2%	[131860-33-8]
Metalaxyl –M (mefenoxam)	12.5%	[70630-3017-0]

Inert Ingredients

Dispersion and suspension	9.9%
Solvent (water)	Up to 100%





HAZARDS IDENTIFICATION:

Health and Environmental	Harmful if swallowed or inhaled. Irritating to eyes and skin.
Hazardous Decomposition Products	Not available
Physical Properties	Appearance: Opaque pale yellow liquid Odor: Paint
Unusual Fire, Explosion and Reactivity Hazards	During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

FIRE-FIGHTING MEASURES: -

Fire and Explosion

Flash Point (Test Method):	> 221°F (Setaflash CC)
Flammable Limits (% in Air):	Lower: Not Applicable Upper: Not Applicable
Autoignition Temperature:	896°F (+/- 9°F)
Flammability:	Not Applicable
Unusual Fire, Explosion and Reactivity Hazards	During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.
In Case of Fire	Use dry chemical, foam or CO2 extinguishing media. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.





FIRST-AID MEASURES:

Ingestion:	If swallowed: Call a poison control center or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Eye Contact:	If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.
Skin Contact:	If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Inhalation:	If inhaled: Move person to fresh air. If person is not breathing give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Notes to Physician	There is no specific antidote if this product is ingested. Treat symptomatically.
Medical Condition	None known.
Likely to be Aggravated by Exposure	

ACCIDENTAL RELEASE:

In Case of Spill or Leak:

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions in Protective Equipment Section. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

PHYSICAL-CHEMICAL DATA:

Appearance:	Opaque pale yellow liquid
Odor:	Paint
Melting Point:	Not Applicable
Boiling Point:	Not Available
Specific Gravity/Density:	1.13 g/ml
pH:	7.5 @ 77°F (25°C)
Solubility in H ₂ O	





Azoxystrobin	6 mg/l in water @ 68°F (20°C)
Metalayl-M	26 g/l @ 77°F (25°C)
Vapor Pressure	
Azoxystrobin	8.25 x 10(-13) mmHg @ 68°F (20°C)
Metalayl-M	2.5 x 10(-5) mmHg @ 77°F (25°C)

STABILITY AND REACTIVITY

Stability:	Stable under normal use and storage conditions.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	None known
Materials to Avoid:	None known
Hazardous Decomposition Products:	None known

PERSONAL PROTECTION/SAFETY:

Ingestion:	Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.
Eye Contact:	Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
Skin Contact:	Where contact is likely, wear chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride [PVC] or Viton), coveralls, socks and chemical-resistant footwear.
Inhalation:	A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits. In case of emergency spills, use a NIOSH approved respirator with any N, R, P or HE filter

HANDLING AND STORAGE:

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.





ACUTE TOXICITY (IRRITATION, SENSITISATION ETC.)

Acute Toxicity/Irritation Studies (Finished Product)

Ingestion:	Oral (LD50 Rabbit) : 1459 mg/kg body weight
dermal	Dermal (LD50 Rabbit) : > 5,000 mg/kg body weight
Inhalation	Inhalation (LC50 Rat) : > 2.58 mg/l air - 4 hours
Eye contact	Moderately Irritating (Rabbit)
Skin contact	Slightly Irritating (Rabbit)
Skin sensitization	Not a Sensitizer (Guinea Pig)

Reproductive/Developmental Effects

Azoxystrobin: Shows weak chromosomal damage in mammalian cells at cytotoxic levels. Negative in whole animal assays for chromosomal and DNA damage at high dosages (> or = 2000 mg/kg).

In rabbits, no effect was observed up to the highest dose level (500 mg/kg/day).

In rats, developmental effects were seen only at maternally toxic doses (100 mg/kg/day).

Mefenoxam: None observed.

Chronic/Subchronic Toxicity Studies:

Azoxystrobin : In a rat 90-day feeding study, liver toxicity was observed at 2000 ppm. This was manifest as gross distension of the bile duct, increased numbers of lining cells and inflammation of the duct. No toxicologically significant effects were seen in repeat dose dog studies.

Data reviews do not indicate any potential for endocrine disruption.

There is no evidence of neurotoxicity in any of the studies conducted with azoxystrobin.

Mefenoxam: Liver effects at high dose animal tests.

Carcinogenicity

Azoxystrobin : No carcinogenic effects observed in rats or mice at doses up to the maximum tolerated dose.

Mefenoxam: None observed.

ECOLOGICAL INFORMATION: -

Ecotoxicity Effects

Azoxystrobin

Fish (Rainbow Trout) 96-hour	LC50 470 ppb
Green Algae 5-day	EC50 106 ppb
Invertebrate (Water Flea) 48-hour	EC50 259 ppb
Bird (Mallard Duck) 14-day	LD50 > 250 mg/kg

Mefenoxam:

Fish (Rainbow Trout) 96-hour	LC50 > 121 ppm
Invertebrate (Water Flea) Daphnia Magna 48-hour	EC50 > 113 ppm
Bird (Bobwhite Quail) 14-day	LD50 981 mg/kg





Environmental Fate

Azoxystrobin :

The information presented here is for the active ingredient, azoxystrobin.

Low bioaccumulation potential. Not persistent in soil. Stable in water. Moderate mobility in soil. Sinks in water (after 24 h).

Mefenoxam:

The information presented here is for the active ingredient, mefenoxam.

Does not bioaccumulate. Not persistent in soil or water. Moderate mobility in soil. Mixes/sinks (after 24 h).

DISPOSAL CONSIDERATIONS:

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable

Listed Waste: Not Applicable