Azoxystrobin 18.20% + Diafenoconazole 11.40% SC

FUNGICIDE

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION:

Active Ingredient(%) Azoxystrobin (18.2%)

Chemical Name : Methyl (E)-2-{2-[6-(2-cyanophenoxy)pyrimidin-4-yloxy]phenyl} -3- methoxyacrylate

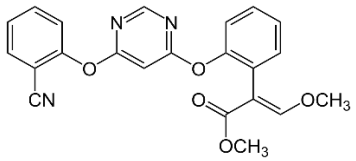
Pesticide Family : A beta-methyoxyacrylate
fungicide

Active Ingredient(%) : Difenoconazole (11.4%)

Chemical Name : 1H-1,2,4-Triazole, 1-[[2-[2-chloro-4-(4-chlorophenoxy)phenyl]-4-methyl-1,3-dioxolan-2-yl]methyl]-

Pesticide Family : Triazole Fungicide
Intended Use Fungicide
Manufactured By : GSP Crop Science Private Limited
Address: 551, GIDC Phase-II, Kathwada
Ahmedabad- 382430
Telephone: +91-79-22900451, 22902556
Fax No.: +91-79-22902556
Website: www.gspcrop.com

Structural formula

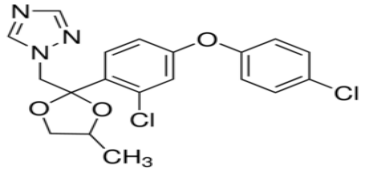


CAS NO. 131860-33-8

Molecular weigh 403.4 g/mol

Empirical Formula $C_{19}H_{17}Cl_2N_3O_3$

Structural formula



CAS NO. 119446-6-3

Molecular weight 406.3 g/mol

2. HAZARDS INDENTIFICATION

Health and Environmental

May be harmful in contact with skin. May cause an allergic skin reaction. Causes mild eye and skin irritation.

Hazardous Decomposition Products

None known.

Physical Properties

Appearance : Light Yellow to Yellow

Odor : Negligible

Unusual Fire, Explosion and Reactivity Hazards

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

3. COMPOSITION / INGREDIENTS

Composition		% w/w	CAS no.
Azoxystrobin Technical a.i.	:	18.20 % w/w	131860-33-8
Diafenoconazole Technical a.i.	:	11.40 % w/w	119446-68-3
Propylene Glycol	:	<5	57-55-6
Other Ingredients	:	Q.S.	-

4. FIRST AID MEASURES

Skin contact	: Remove contaminated clothing, shoes and leather goods, gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap.
Eyes Contact	: Immediately flush the eyes with gently flowing, lukewarm water or saline solution for 20 minutes, occasionally lifting the upper and lower lids. Obtain medical attention if necessary.
Inhalation	: Remove source of contamination or move victim to fresh air. Keep victim warm and at rest. Treat symptomatically and supportively. Obtain medical advice if necessary.
Ingestion	: Wash mouth out with water. If vomiting occurs, give more water to drink to assist dilution.
Other information	: Treat symptomatically and supportively as and when required.
Antidote	: No specific antidote is known, Treat symptomatically.

5. FIRE AND EXPLOSION DATA

Fire and Explosion
Flash Point (Test Method): Flammable Limits (% in Air):
Lower: Not Applicable Not Available
Upper: Not Applicable
Auto ignition Temperature: Does not flash
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.
Use dry chemical, foam or CO_2 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.

6. ACCIDENTAL RELEASE MEASURES

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. 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.

7. 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.

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.

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

Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application

there is a potential for exposure to the material. Wash thoroughly with soap and water

handling.

Eye Contact: Where eye contact is likely, use chemical splash goggles.

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.

effective engineering controls to comply with occupational exposure limits.

In case of emergency spills, use a NIOSH certified respirator with any N, R, P or HE filter.

9. PHYSICAL & CHEMICAL PROPERTIES

Physical state	:	Liquid
Colour	:	Light yellow to yellow
Stability	:	Stable for two years in normal conditions
Compatibility	:	Can compatible with many common pesticides;
Odour	:	Weak
pH	:	5 to 9 (1% sol.) 7.5 to 8.5 (100%)
Flash point	:	Non flammable
Flammability	:	Not flammable.
Vapour pressure	:	N/A
Relative Density	:	1.11 gm/cm^3

10. STABILITY AND REACTIVITY

Hazardous decomposition products: Combustion or thermal decomposition will evolve toxic and irritant vapors.

Hazardous reactions : None known.
Hazardous polymerization does not occur.
Stable under normal conditions.

11. TOXICOLOGICAL INFORMATION (a.i.)

Acute oral toxicity : LD50 female Rat, > 2,000 mg/kg
GHS-Classification None

Acute inhalation toxicity : Median lethal concentration male and female Rat, 2.06 - 5.17 mg/l, 4 h
GHS-Classification Category 4

Acute dermal toxicity : LD50 male and female Rat, > 2,000 mg/kg
GHS-Classification None

Skin irritation GHS-Classification None	:	Rabbit: Slightly irritating
Eye irritation	:	Rabbit: Mild eye irritation GHS-Classification None
Sensitisation	:	Guinea pig: A skin sensitizer in animal tests. GHS-Classification Category 1
Long term toxicity		
Azoxystrobin	:	Did not show carcinogenic, teratogenic or mutagenic effects in animal experiments.
Difenoconazole	:	Did not show carcinogenic, teratogenic or mutagenic effects in animal experiments.

12. ECOLOGICAL INFORMATION (a.i.)

ELIMINATION INFORMATION (PERSISTENCE AND DEGRADABILITY)

Stability in water

Azoxystrobin	: Degradation half life: 214d Azoxystrobin is stable in water.
Difenoconazole	: Degradation half life:1d Difenoconazole is not persistent in water

Stability in soil

Azoxystrobin	: Degradation half life : 80 d Azoxystrobin is not persistent in soil.
Difenoconazole	: Degradation half life : 149 - 187 d Difenoconazole is not persistent in soil.

Mobility

Azoxystrobin	: Azoxystrobin has low to very high mobility in soil.
Difenoconazole	: Difenoconazole has low mobility in soil.

Bioaccumulation

Azoxystrobin	: Azoxystrobin has medium bioaccumulation potential
Difenoconazole	: Difenoconazole has high potential to bioaccumulate.

ECOTOXICITY EFFECTS

Toxicity to fish	: LC50 Oncorhynchus mykiss (rainbow trout), 1.7 mg/l , 96 h
	: LC50 Cyprinus carpio (Carp), 4.2 mg/l , 96 h
Toxicity to daphnia	: EC50 Daphnia magna (Water flea), 1.1 mg/l , 48 and other aquatic inverte- brates.
Toxicity to algae	: EbC50 Pseudokirchneriella subcapitata (green algae), 0.587 mg/l , 72 h
	: ErC50 Pseudokirchneriella subcapitata (green algae), 3.09 mg/l , 72 h

FURTHER INFORMATION ON ECOLOGY

Additional ecological information	: GHS-Classification
Information	: Category 2

13.DISPOSAL PROCEDURES

Waste treatment methods

Waste from residues/ unused products:
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging
Improper disposal or reuse of this container may be dangerous and illegal.

Other Information
Waste codes should be assigned by the user based on the application for which the product was used.

14. TRANSPORT INFORMATION

Land transport
ADR:
UN-Number: 3082
Class: 9
Labels: 9
Packaging group: III
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(AZOXYSTROBIN AND DIFENOCONAZOLE)
Environmentally hazardous: Environmentally hazardous

Sea transport
IMDG:
UN-Number: 3082
Class: 9
Labels: 9
Packaging group: III
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(AZOXYSTROBIN AND DIFENOCONAZOLE
Marine pollutant : Marine pollutant

Air transport
IATA-DGR:
UN/ID No.: UN 3082
Class: 9
Labels: 9
Packaging group: III
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(AZOXYSTROBIN AND DIFENOCONAZOLE)

15. REGULATORY INFORMATION

Safety Health or Environmental regulations/ legislation specific for substance or mixture.

16. OTHER INFORMATION

The information contained in this safety date sheet is given in good faith. It is accurate to our best of knowledge and belief and represents the most up to date information. The information given in this data sheet does not constitute or replace the users own assessment of work place risk as required by other health and safety legislation. GSP Crop Science Private Ltd. will not be liable for any claims or damages arising out of use of this information.