MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product name: **AZOXYSTROBIN 18.2% + DIFENOCONAZOLE 11.4% SC**

Use / description of product: Use as an agricultural/horticultural fungicide

Company name:

SOLAS CROPTECH PRIVATE LIMITED
36, Strand Road, 4th Floor, Room No-01, Kolkata- 700001
Email: solascroptech@yahoo.in
Toll Free No.:033-22313306

2. HAZARDS IDENTIFICATION

GHS Classification
Hazard symbol:

GHS07
Exclamation Mark

GHS09
Environment

Signal word **WARNING**

H-Phrase
H303 May be harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H410 Very toxic to aquatic life with long lasting effects.

Phrase
S24: Avoid contact with skin.
S36/37: Wear suitable protective clothing and gloves.
S46: If swallowed, seek medical advice immediately and show this container or label.
S60: This material and its container must be disposed of as hazardous waste.
S61: Avoid release to the environment.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS	%
Active ingredient (Azoxystrobin)	131860-33-8	18.2
Active ingredient (Difenoconazole)	119446-68-3	11.4
Other ingredients	-------	QS to make up 1000

4. FIRST AID MEASURES

Most Important symptoms and effects, both acute and delayed

Skin contact There may be mild irritation at the site of contact

Eye contact There may be irritation and redness. The vision may become blurred

Ingestion There may be soreness and redness of the mouth and throat

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Description of first aid measures

In general	Have the product container, label or Safety Data Sheet with you when calling the emergency number, a poison control center or physician, or going for treatment..
After Ingestion	Take the victim into fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest Call a physician or poison control center immediately.
After eye contact	Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.
After skin contact	Immediately wash skin with soap and plenty of water. Consult a physician if irritation develops.
After Inhalation	Remove to fresh air. Consult a physician if irritation develops

Indication of any immediate medical attention and special treatment needed
Supportive care. No specific antidote. Treatment based on judgement of physician, in response to symptoms of patient.

5. FIRE-FIGHTING MEASURES

Extinguishing media:	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
Exposure hazards:	Exposure to decomposition products may be a hazard to health.
Protection of fire-fighters:	Wear self-contained breathing apparatus. Run-off from fire control may be a pollution hazard. If area is not too heavily exposed to fire, and if conditions permit, let fire burn itself out, since water may increase the contamination hazard.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Eliminate all sources of ignition. Do not create dust.
Environmental precautions:	Do not discharge into drains or rivers. Contain the spillage using bunding.
Clean-up procedures:	Transfer to a closable, labelled salvage container for disposal by an appropriate method. Do not use equipment in clean-up procedure which may produce sparks.

7. HANDLING AND STORAGE

Handling requirements:	Ensure there is sufficient ventilation of the area. Smoking is forbidden. Use non-sparking tools. When handling do not eat, drink or smoke.
Storage conditions:	Store in cool, well ventilated area. Keep away from sources of ignition. Keep container tightly closed. Keep in original containers, out of reach of children Never allow the product to become wet during storage. This may lead to chemical changes, which will reduce the effectiveness as a fungicide and could create flammable vapours.
Suitable packaging:	Must only be kept in original packaging.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures:	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. Maintain air concentrations below occupational exposure standards. Where necessary, seek additional occupational hygiene advice.
Respiratory protection:	Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.
Hand protection:	Protective gloves Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.
Eye protection:	Safety goggles.
Skin protection:	Mixers and loaders must wear overalls , protective goggles and chemical-resistant apron. Applicators and other handlers must wear overalls, goggles and waterproof gloves. Any clothing or other absorbent material which has been drenched or heavily contaminated must be discarded.

9. PHYSICAL AND CHEMICAL PROPERTIES

State:	Liquid
Colour:	Beige
Odour:	Characteristic
Solubility in water:	Forms suspension in water
pH	6 - 9 (1% dispersion)
Flash point °C:	Not Applicable

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to avoid:	Acids and moisture (in storage)
Hazardous decomp. products:	Elevated temperature or free water promotes decomposition, which may cause spontaneous combustion. In combustion emits toxic fumes. In combustion emits toxic fumes of sulphur oxides, carbon dioxide / carbon monoxide, nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Hazardous ingredients: AZOXYSTROBIN and DIFENOCONAZOLE

Acute toxicity (Assessment largely or completely based on data for active substance

Acute Oral LD_{50} (Rat)	Azoxystrobin : LD50 (Rat, male and female): > 5,000 mg/kg Difenoconazole : LD50 (Rat, male and female): 1,453 mg/kg
Acute Dermal LD_{50}	Azoxystrobin : LD50 (Rat, male and female): > 2,000 mg/kg Difenoconazole : LD50 (Rabbit, male and female): > 2,010 mg/kg
Acute Inhalation LD_{50}	Azoxystrobin : LC50 (Rat, female): 0.7 mg/l (4h) Difenoconazole : LC50 (Rat, male and female): > 3,300 mg/m3 (4h)

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EYE Irritation (Rabbit)	May cause eye irritation.
SKIN Irritation (Rabbit)	Non irritant
Skin Sensitization (Guinea Pig)	Non irritant

12. ECOLOGICAL INFORMATION

Ecotoxicity: (Assessment largely or completely based on data for active substance)

Aquatic toxicity :	Material is very toxic to aquatic organisms.
Fish mg/l LC_{50} (96 h) trout)): 1.1 **mg/l**	Azoxystrobin : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.47 Difenoconazole : LC50 (Oncorhynchus mykiss (rainbow
Algae EC_{50} (96 h)	Azoxystrobin : ErC50 (Raphidocelis subcapitata (freshwater green alga) 2 mg/l Difenoconazole : EC50 (Navicula pelliculosa (Freshwater diatom) 0.091 mg/l (72 h)
Daphnia EC_{50} (48 hr)	Azoxystrobin : EC50 (Americamysis): 0.055 mg/l (96 h) Difenoconazole : EC50 (Daphnia magna (Water flea)): 0.77 mg/l (48 h)

Environmental Fate

Persistence and Degradability:	No data
Bio-accumulation potential:	Bio-concentration potential is low.
Mobility in soil:	Potential for mobility in soil is low.

13. DISPOSAL CONSIDERATIONS

Disposal operations:	Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed of at an approved waste disposal facility.
Disposal of packaging:	Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. TRANSPORT INFORMATION

U.S> Department of Transportation (DOT) Bulk

UN no:	3082
Shipping name:	Environmentally Hazardous Substance, solid, n.o.s. (Azoxystrobin and Difenoconazole)
Hazard Class:	9
Packing group:	III

Land Transport (ADR / RID)

UN no:	3082
Shipping name:	Environmentally Hazardous Substance, solid, n.o.s. Azoxystrobin and Difenoconazole)
Hazard Class:	9
Packing group:	III

Marine Transport (IMDG / IMO)

UN no:	3082
Shipping name:	Environmentally Hazardous Substance, solid, n.o.s.

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	(Azoxystrobin and Difenoconazole)
Hazard Class:	9
Packing group:	III
Marine pollutant:	Yes
EmS:	F-A, S-F

Air transport (IATA / ICAO)

UN no:	3082
Shipping name:	Environmentally Hazardous Substance, solid, n.o.s. **(**Azoxystrobin and Difenoconazole)
Hazard Class:	9
Packing group:	III
Cargo Packing instructions:	

15. REGULATORY INFORMATION

Xn

Harmful or Irritant

N

Dangerous for environment

Hazard symbol	**Xn, N**
Risk Phrase	**R21** Harmful in contact in skin
Safety Phrase	**S2** Keep out of reach of children **S60** This material and its container must be disposed of as hazardous waste **S61** Avoid release to the environment. refer to special instructions/safety data sheets

16. OTHER INFORMATION

Legal disclaimer:	The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.