

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

### IDENTIFICATION OF THE SUBSTANCE OR PREPARATION

Tradename **AMISTAR TOP**  
 Design Code **A13703G**  
 AGI Code **139463**  
 Sales Codes **30927/27303**

### COMPANY/UNDERTAKING IDENTIFICATION

Company Syngenta Crop Protection UK Ltd  
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Emergency Phone **0044 (0)1484 538444 (24h)**

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

### HAZARDOUS COMPONENTS

CAS-NO.	CHEMICAL NAME	CONCENTRATION (% W/W)	HAZARD SYMBOLS	RISK PHRASES (R)
131860-33-8	azoxystrobin	18.2	T, N	23, 50/53
119446-68-3	difenoconazole	11.4	Xn, N	22, 50/53
68439-49-6	alcohols, C16-18, ethoxylated	15-25	Xn	22, 41

For the full text of the R phrases mentioned in this section, see section 16.

## 3. HAZARDS IDENTIFICATION

Harmful by inhalation. May cause sensitisation by skin contact. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 4. FIRST AID MEASURES

**Inhalation:** Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or Poison Control Centre immediately.

**Skin 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.

**Eye contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.

**Ingestion:** If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.

**Medical advice:** There is no specific antidote available. Treat symptomatically.

## F U N G I C I D E

**5. FIRE FIGHTING MEASURES****SUITABLE EXTINGUISHING MEDIA**

**Extinguishing media – small fires:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Extinguishing media – large fires:** Use alcohol-resistant foam or water spray.

**Extinguishing media which must not be used for safety reasons:** Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards during fire fighting:** As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health.

**Special protective equipment for fire fighters:** In the event of fire, wear full protective clothing and self-contained breathing apparatus.

**Further information:** Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions:** Refer to protective measures listed in sections 7 and 8.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

**Methods for cleaning up:** Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations (see section 13).

**Additional advice:** If the product contaminates rivers and lakes or drains inform respective authorities.

**7. HANDLING AND STORAGE****HANDLING**

**Advice on safe handling:** No special protective measures against fire required. Avoid contact with skin and eyes. When using, do not eat, drink or smoke. For personal protection see section 8.

**STORAGE**

**Requirements for storage areas and containers:** No special storage conditions required. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs.

Other data: Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****COMPONENTS WITH WORKPLACE CONTROL PARAMETERS**

Components	Exposure limit(s)	Value type	Source
azoxystrobin	2 mg/m <sup>3</sup>	8 h TWA	SYNGENTA
difenoconazole	8 mg/m <sup>3</sup>	8 h TWA	SYNGENTA

**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. If airborne mists or vapours are generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit. Where necessary, seek additional occupational hygiene advice.

**PERSONAL PROTECTIVE EQUIPMENT**

When using this product refer to the label for details. In all other cases, use the following Personal Protective Equipment:

**Protective measures:** The use of technical measures should always have priority over the use of personal protective equipment. When selecting personal protective equipment, seek appropriate professional advice. Personal protective equipment should be certified to appropriate standards.

**Respiratory protection:** A particulate filter respirator may be necessary until effective technical measures are installed. Protection provided by air-purifying respirators is limited. 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.

**Hand protection:** Chemical resistant gloves should be used. Gloves should be certified to an appropriate standard. Gloves should have a minimum breakthrough time that is appropriate to the duration of exposure. The breakthrough time of gloves varies according to the thickness, material and manufacturer. Gloves should be changed when breakthrough is suspected. Suitable material: nitrile rubber.

**Eye protection:** Eye protection is not usually required. Follow any site specific eye protection policies.

**Skin and body protection:** Assess the exposure and select chemical resistant clothing based on the potential for contact and the permeation / penetration characteristics of the clothing material. Wash with soap and water after removing protective clothing. Decontaminate clothing before re-use, or use disposable equipment (suits, aprons, sleeves, boots, etc.). Wear as appropriate: impervious protective suit.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Form:	Liquid
Colour:	Light yellow to yellow
Odour:	Weak
pH:	5–9 at 1% w/v 7.5–8.5 at 100% w/v (20°C)
Flash Point:	>100°C at 755 mmHg
Oxidising Properties:	Not oxidising
Explosive Properties:	Not explosive
Density:	1.11 g/cm <sup>3</sup> at 20°C
Miscibility:	Miscible
Dynamic Viscosity:	169–646 mPa.s at 20°C 98.0–472 mPa.s at 40°C
Surface Tension:	27.9 mN/m at 20°C

## F U N G I C I D E

**10. STABILITY AND REACTIVITY**

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

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

**11. TOXICOLOGICAL INFORMATION**

**Acute Oral Toxicity LD<sub>50</sub> Female Rat:** >2,000 mg/kg

**Acute Inhalation Toxicity LC<sub>50</sub> Male and Female Rat:** 2.06–5.17 mg/l, 4 h

**Acute Dermal Toxicity LD<sub>50</sub> Male and Female Rat:** >2,000 mg/kg

**Skin Irritation Rabbit:** Slightly Irritating

**Eye Irritation Rabbit:** Mild eye irritation

**Sensitisation Guinea pig:** A skin sensitiser in animal tests

**LONG-TERM TOXICITY (azoxystrobin, difenoconazole):** Did not show carcinogenic, teratogenic or mutagenic effects in animal experiments.

**12. ECOLOGICAL INFORMATION****ELIMINATION INFORMATION (PERSISTENCE AND DEGRADABILITY)**

**Bioaccumulation:** Azoxystrobin has medium potential for bioaccumulation. Difenoconazole has high potential to bioaccumulate.

**Stability in water:** Azoxystrobin is stable in water. Difenoconazole is not persistent in water.

**Stability in soil:** Azoxystrobin is moderately persistent in soil. Difenoconazole is very persistent in soil.

**Mobility:** Azoxystrobin has moderate mobility in soil. Difenoconazole has low mobility in soil.

**ECOTOXICITY EFFECTS**

**Toxicity to Fish LC<sub>50</sub>:** *Oncorhynchus mykiss* (rainbow trout), 1.7 mg/l, 96 h  
*Cyprinus carpio* (Carp), 4.2 mg/l, 96 h

**Toxicity to Algae EbC<sub>50</sub>:** *Selenastrum capricornutum* (green algae), 0.587 mg/l, 72 h

**Toxicity to Algae ErC<sub>50</sub>:** *Selenastrum capricornutum* (green algae), 3.09 mg/l, 72 h

**Toxicity to Aquatic Invertebrates EC<sub>50</sub>:** *Daphnia magna* (Water flea), 1.1 mg/l, 48 h

**13. DISPOSAL CONSIDERATIONS**

**Product:** Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

**Contaminated packaging:** Empty remaining contents. Triple rinse containers. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.

## 14. TRANSPORT INFORMATION

<b>RAIL/ROAD/SEA/AIR (RID/ADR/IMDG/ICAO/IATA)</b>	Class 9	UN Number 3082	Packaging Group III
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (AZOXYSTROBIN AND DIFENOCONAZOLE)		
Marine pollutant:	Yes		

## 15. REGULATORY INFORMATION

<b>Hazard symbols/ Classifications</b>	<b>Xi N</b>	<b>IRRITANT DANGEROUS FOR THE ENVIRONMENT</b>
<b>Risk phrases (R)</b>	20 43 50/53	Harmful by inhalation. May cause sensitisation by skin contact. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>Safety phrases (S)</b>	2 13 20/21 35 37 57	Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. This material and its container must be disposed of in a safe way. Wear suitable protective gloves. Use appropriate containment to avoid environmental contamination.
<b>Special label</b>	To avoid risks to man and the environment, comply with the instructions for use.	

## 16. OTHER INFORMATION

Always read the label. Use pesticides safely.

Product approval number: MAPP 12761

Based on edition 22/10/2009, version 5 with local assessment.

### Text of R phrases mentioned in Section 2:

**R22** Harmful if swallowed.

**R23** Toxic by inhalation.

**R36** Irritating to the eyes.

**R50/53** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.**