

AMISTAR MAX

Version 2.0 Revision Date: 05.01.2024 SDS Number: S00031016837 Date of last issue: 19.07.2023
Date of first issue: 19.07.2023

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : AMISTAR MAX
Design code : A12916B

Manufacturer or supplier's details

Company : Syngenta Crop Protection AG
Address : Rosentalstrasse 67, Postfach
CH-4002 Basel
Switzerland
Telephone : +41 61 323 11 11

Emergency telephone number : +44 1484 538444

Telefax : +41 61 323 12 12

Recommended use of the chemical and restrictions on use

Recommended use : Fungicide

2. HAZARDS IDENTIFICATION**GHS Classification**

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Carcinogenicity : Category 2

Specific target organ toxicity - repeated exposure : Category 2 (Bile duct)

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard : Category 1

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H302 + H332 Harmful if swallowed or if inhaled.
H351 Suspected of causing cancer.
H373 May cause damage to organs (Bile duct) through pro-

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Precautionary statements	<p>longed or repeated exposure. H410 Very toxic to aquatic life with long lasting effects.</p> <p>Prevention: P203 Obtain, read and follow all safety instructions before use. P260 Do not breathe mist or vapours. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.</p> <p>Response: P301 + P317 + P330 IF SWALLOWED: Get medical help. Rinse mouth. P304 + P340 + P317 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help. P318 IF exposed or concerned, get medical advice. P391 Collect spillage.</p> <p>Storage: P405 Store locked up.</p> <p>Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.</p>
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Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
folpet (ISO)	133-07-3	>= 30 - < 50
azoxystrobin (ISO)	131860-33-8	>= 2.5 - < 10

4. FIRST AID MEASURES

General advice	: 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.
If inhaled	: Move the victim 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.
In case of skin contact	: Take off all contaminated clothing immediately. Wash off immediately with plenty of water.

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If skin irritation persists, call a physician.
Wash contaminated clothing before re-use.

In case of 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.

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

Most important symptoms and effects, both acute and delayed : Nonspecific
No symptoms known or expected.
Harmful if swallowed or if inhaled.
Suspected of causing cancer.
May cause damage to organs through prolonged or repeated exposure.

Notes to physician : There is no specific antidote available.
Treat symptomatically.

5. FIREFIGHTING MEASURES

Suitable 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

Unsuitable extinguishing media : 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.

Specific extinguishing methods : Do not allow run-off from fire fighting to enter drains or water courses.
Cool closed containers exposed to fire with water spray.

Special protective equipment for firefighters : Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : 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.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and 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

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/ national regulations (see section 13).
Clean contaminated surface thoroughly.
Clean with detergents. Avoid solvents.
Retain and dispose of contaminated wash water.

7. HANDLING AND STORAGE

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.

Conditions for safe storage : 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 feedingstuffs.

Further information on storage stability : 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	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
folpet (ISO)	133-07-3	TWA	0.4 mg/m ³	Syngenta
		TWA (Inhalable particulate matter)	1 mg/m ³	ACGIH
azoxystrobin (ISO)	131860-33-8	TWA	0.7 mg/m ³	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.

Maintain air concentrations below occupational exposure standards.

Where necessary, seek additional occupational hygiene advice.

Personal protective equipment

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Suitable respiratory equipment:
Respirator with a half face mask
The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-

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Hand protection	contained breathing apparatus must be used.
Material	: Nitrile rubber
Break through time	: > 480 min
Glove thickness	: 0.5 mm
Remarks	: Wear protective gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Eye protection	: No special protective equipment required.
Skin and body protection	: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Remove and wash contaminated clothing before re-use. Wear as appropriate: Impervious clothing
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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: suspension
Colour	: white to beige
Odour	: Strong pungent
Odour Threshold	: No data available
pH	: 4 - 8 Concentration: 1 %w/v (aqueous suspension)
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: Method: Pensky-Martens closed cup does not flash

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Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	No data available
Relative vapour density	:	No data available
Density	:	1.28 g/cm ³ (20 °C)
Solubility(ies)		
Water solubility	:	completely miscible
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	> 650 °C
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	145 - 415 mPa.s (20 °C) 106 - 291 mPa.s (40 °C)
Viscosity, kinematic	:	No data available
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Surface tension	:	47.3 mN/m, 21 °C
Particle size	:	No data available

10. STABILITY AND REACTIVITY

Reactivity	:	None reasonably foreseeable.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reaction known under conditions of normal use.
Conditions to avoid	:	No decomposition if used as directed.
Incompatible materials	:	None known.
Hazardous decomposition products	:	No hazardous decomposition products are known.

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11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Ingestion
Inhalation
Skin contact
Eye contact

Acute toxicity

Harmful if swallowed or if inhaled.

Product:

Acute oral toxicity : LD50(Rat, male and female): 1,889 mg/kg

Acute inhalation toxicity : Acute toxicity estimate: 3.22 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Assessment: The substance/mixture is not toxic on inhalation as defined by dangerous goods regulations.

Acute toxicity estimate: 3.21 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Acute dermal toxicity : LD50(Rat, male and female): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

Components:

folpet (ISO):

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : LC50 (Rat): 1.89 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

azoxystrobin (ISO):

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat, female): 0.698 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg

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Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Product:

Species : Rabbit
Result : No skin irritation

Result : Repeated exposure may cause skin dryness or cracking.

Components:**folpet (ISO):**

Species : Rabbit
Result : No skin irritation

azoxystrobin (ISO):

Species : Rabbit
Result : No skin irritation

Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

Product:

Species : Rabbit
Result : No eye irritation

Components:**folpet (ISO):**

Species : Rabbit
Result : Eye irritation

azoxystrobin (ISO):

Species : Rabbit
Result : No eye irritation

Respiratory or skin sensitisation**Skin sensitisation**

Based on available data, the classification criteria are not met.

Respiratory sensitisation

Not classified due to lack of data.

Product:

Test Type : Buehler Test
Species : Guinea pig
Result : Does not cause skin sensitisation.

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Components:**folpet (ISO):**

Species : Guinea pig
Result : May cause sensitisation by skin contact.

azoxystrobin (ISO):

Species : Guinea pig
Result : Does not cause skin sensitisation.

Germ cell mutagenicity

Not classified due to lack of data.

Components:**folpet (ISO):**

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

azoxystrobin (ISO):

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

Carcinogenicity

Suspected of causing cancer.

Components:**folpet (ISO):**

Carcinogenicity - Assessment : Limited evidence of carcinogenicity in animal studies

azoxystrobin (ISO):

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Not classified due to lack of data.

Components:**folpet (ISO):**

Reproductive toxicity - Assessment : No toxicity to reproduction

azoxystrobin (ISO):

Reproductive toxicity - Assessment : No toxicity to reproduction, No effects on or via lactation

STOT - single exposure

Not classified due to lack of data.

STOT - repeated exposure

May cause damage to organs (Bile duct) through prolonged or repeated exposure.

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Components:

azoxystrobin (ISO):

Target Organs : Bile duct
 Assessment : The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

Aspiration toxicity

Not classified due to lack of data.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.29 mg/l
 Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2.6 mg/l
 Exposure time: 48 h

Toxicity to algae/aquatic plants : ErC50 (Raphidocelis subcapitata (freshwater green alga)): 4 mg/l
 Exposure time: 72 h

EC10 (Raphidocelis subcapitata (freshwater green alga)): 0.75 mg/l
 End point: Growth rate
 Exposure time: 72 h

Components:

folpet (ISO):

Toxicity to fish : LC50 (Salmo trutta (brown trout)): 0.098 mg/l
 Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.68 mg/l
 Exposure time: 48 h

Toxicity to algae/aquatic plants : ErC50 (Desmodesmus subspicatus (green algae)): > 10 mg/l
 Exposure time: 72 h

M-Factor (Acute aquatic toxicity) : 10

azoxystrobin (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.47 mg/l
 Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.28 mg/l
 Exposure time: 48 h

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EC50 (Americamysis): 0.055 mg/l
Exposure time: 96 h

Toxicity to algae/aquatic plants : ErC50 (Raphidocelis subcapitata (freshwater green alga)):
1.109 mg/l
Exposure time: 72 h

EC10 (Raphidocelis subcapitata (freshwater green alga)):
0.0303 mg/l
End point: Growth rate
Exposure time: 72 h

ErC50 (Skeletonema costatum (marine diatom)): 0.250 mg/l
Exposure time: 72 h

NOEC (Skeletonema costatum (marine diatom)): 0.010 mg/l
End point: Growth rate
Exposure time: 72 h

M-Factor (Acute aquatic toxicity) : 10

Toxicity to microorganisms : IC50 (Pseudomonas putida): > 3.2 mg/l
Exposure time: 6 h

Toxicity to fish (Chronic toxicity) : NOEC: 0.16 mg/l
Exposure time: 28 d
Species: Oncorhynchus mykiss (rainbow trout)

EC10: 0.2197 mg/l
Exposure time: 33 d
Species: Pimephales promelas (fathead minnow)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.044 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)

NOEC: 0.00954 mg/l
Exposure time: 28 d
Species: Americamysis

M-Factor (Chronic aquatic toxicity) : 10

Persistence and degradability

Components:

folpet (ISO):

Biodegradability : Result: Readily biodegradable.

Stability in water : Degradation half life: < 0.05 d
Remarks: Product is not persistent.

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azoxystrobin (ISO):

Biodegradability : Result: Not readily biodegradable.

Stability in water : Degradation half life: 224 d
Remarks: Persistent in water.**Bioaccumulative potential****Components:****folpet (ISO):**

Bioaccumulation : Remarks: Does not bioaccumulate.

Partition coefficient: n-octanol/water : log Pow: 3.017 (20 °C)

azoxystrobin (ISO):

Bioaccumulation : Remarks: Does not bioaccumulate.

Mobility in soil**Components:****folpet (ISO):**

Distribution among environmental compartments : Remarks: Moderately mobile in soils

Stability in soil : Dissipation time: 4.3 d
Percentage dissipation: 50% (DT50)
Remarks: Product is not persistent.**azoxystrobin (ISO):**

Distribution among environmental compartments : Remarks: Low mobility in soil.

Stability in soil : Dissipation time: 81.3 d
Percentage dissipation: 50 % (DT50)
Remarks: Product is not persistent.**Other adverse effects****Components:****folpet (ISO):**Results of PBT and vPvB assessment : This substance is not considered to be very persistent and very bioaccumulating (vPvB).
This substance is not considered to be persistent, bioaccumulating and toxic (PBT).**azoxystrobin (ISO):**

Results of PBT and vPvB : This substance is not considered to be persistent, bioaccumu-

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net mass of 5 kg or less for solids.

IMDG-Code

UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (AZOXYSTROBIN, FOLPET)
Class : 9
Packing group : III
Labels : 9
EmS Code : F-A, S-F
Marine pollutant : yes
Remarks : This product can be subject to exemptions when packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids, or having a net mass of 5 kg or less for solids.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Special precautions for user

Remarks : This product should not be transported in Sealed freight containers (Transport Equivalent Units)., Vented packages may not be transported by air.

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. REGULATORY INFORMATION**Safety, health and environmental regulations/legislation specific for the substance or mixture**

This Safety Data Sheet contains no country specific regulatory information. It may not meet the regulatory requirements of a specific country.

16. OTHER INFORMATION

Revision Date : 05.01.2024
Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
Syngenta : Syngenta Occupational Exposure Limit
ACGIH / TWA : 8-hour, time-weighted average
Syngenta / TWA : Time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for

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Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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.

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