according to the OSHA Hazard Communication Standard



# HERITAGE FUNGICIDE

 Version
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 SDS Number:
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 09/17/2024
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### **SECTION 1. IDENTIFICATION**

Product name : HERITAGE FUNGICIDE

Design code : A12704A

Product Registration number : 100-1093

Manufacturer or supplier's details

Company name of supplier : Syngenta Crop Protection, LLC

Address : Post Office Box 18300 Greensboro NC 27419

United States of America (USA)

Telephone : 1 800 334 9481 Telefax : 1 336 632 2192

E-mail address : sds.requests@syngenta.com

Emergency telephone : 1 800 888 8372

Recommended use of the chemical and restrictions on use

Recommended use : Fungicide

Restrictions on use : General Use Pesticide

### **SECTION 2. HAZARDS IDENTIFICATION**

# GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Combustible dust

Reproductive toxicity : Category 2

Specific target organ toxicity

- repeated exposure

Category 2 (Bile duct)

**GHS** label elements

Hazard pictograms



Signal Word : Warning

Hazard Statements : May form combustible dust concentrations in air.

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs (Bile duct) through pro-

longed or repeated exposure.

Precautionary Statements : Prevention:

according to the OSHA Hazard Communication Standard



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P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read

and understood.

P260 Do not breathe dust.

P280 Wear protective gloves/ protective clothing/ eye protection/

face protection.

Response:

P308 + P313 IF exposed or concerned: Get medical advice/

attention.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste dis-

posal plant.

## Other hazards

May form combustible dust concentrations in air.

### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

### Components

Chemical name	CAS-No.	Concentration (% w/w)
Azoxystrobin	131860-33-8	50
kaolin	1332-58-7	>= 30 - < 50
Residues (petroleum), catalytic re-	68425-94-5	>= 5 - < 10
former fractionator, sulfonated, poly-		
mers with formaldehyde, sodium salts		
sulfuric acid, mono-C12-18-alkyl es-	68955-19-1	>= 1 - < 5
ters, sodium salts		
methanol	67-56-1	>= 0.1 - < 1
toluene	108-88-3	>= 0.1 - < 1

Actual concentration is withheld as a trade secret

### **SECTION 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 : 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.

In case of 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.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes.

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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: contains petroleum distillates and/or

aromatic solvents.

Most important symptoms and effects, both acute and

delayed

Aspiration may cause pulmonary edema and pneumonitis.

Suspected of damaging the unborn child.

May cause damage to organs through prolonged or repeated

exposure.

Notes to physician There is no specific antidote available.

Treat symptomatically.

Do not induce vomiting: contains petroleum distillates and/or

aromatic solvents.

## **SECTION 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

Alcohol-resistant foam

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 ingredients, fire

will produce dense black smoke containing hazardous

products of combustion (see section 10).

Exposure to decomposition products may be a hazard to

health.

Further information Do not allow run-off from fire fighting to enter drains or water

Cool closed containers exposed to fire with water spray.

Special protective equipment:

for fire-fighters

Wear full protective clothing and self-contained breathing

apparatus.

### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protec- : tive equipment and emer-

gency procedures

Refer to protective measures listed in sections 7 and 8.

Avoid dust formation.

Do not flush into surface water or sanitary sewer system. **Environmental precautions** 

If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods and materials for

Contain spillage, pick up with an electrically protected vacuum containment and cleaning up cleaner or by wet-brushing and transfer to a container for

according to the OSHA Hazard Communication Standard



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disposal according to local regulations (see section 13).

Do not create a powder cloud by using a brush or compressed

Clean contaminated surface thoroughly. Clean with detergents. Avoid solvents.

Retain and dispose of contaminated wash water.

### **SECTION 7. HANDLING AND STORAGE**

Advice on safe handling This material is capable of forming flammable dust clouds in

> air, which, if ignited, can produce a dust cloud explosion. Flames, hot surfaces, mechanical sparks and electrostatic discharges can serve as ignition sources for this material.

Electrical equipment should be compatible with the

flammability characteristics of this material. The flammability characteristics will be made worse if the material contains traces of flammable solvents or is handled in the presence of

flammable solvents.

In general personnel handling this material and all conducting equipment should be electrically earthed or grounded. Bulk bags (FIBC) used to contain this material should be Type B,

Type C or Type D. Type C bags must be electrically grounded or earthed before powder is charged to or discharged from the bag. If metal or fiber drums are used to

to the filling equipment and grounded.

This material could become charged under certain conditions

contain this material, make certain the metal parts are bonded

such as pneumatic conveying. Avoid contact with skin and eyes. When using do not eat, drink or smoke. For personal protection see section 8.

Conditions for safe storage 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 stor-

age stability

Physically and chemically stable for at least 2 years when

stored in the original unopened sales container at ambient

temperatures.

# SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Azoxystrobin	131860-33-8	TWA	0.7 mg/m3	Syngenta
kaolin	1332-58-7	TWA (Res- pirable par- ticulate mat- ter)	2 mg/m3	ACGIH
		TWA (Respirable)	5 mg/m3	NIOSH REL
		TWA (total)	10 mg/m3	NIOSH REL

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		TWA (total dust)	15 mg/m3	OSHA Z-1
		TWÁ (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (Total dust)	10 mg/m3	OSHA P0
		TWA (respirable dust fraction)	5 mg/m3	OSHA P0
methanol	67-56-1	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200 ppm 260 mg/m3	NIOSH REL
		ST	250 ppm 325 mg/m3	NIOSH REL
		TWA	200 ppm 260 mg/m3	OSHA Z-1
		STEL	250 ppm 325 mg/m3	OSHA P0
		TWA	200 ppm 260 mg/m3	OSHA P0
toluene	108-88-3	TWA	20 ppm	ACGIH
		TWA	100 ppm 375 mg/m3	NIOSH REL
		ST	150 ppm 560 mg/m3	NIOSH REL
		TWA	200 ppm	OSHA Z-2
		CEIL	300 ppm	OSHA Z-2
		Peak	500 ppm (10 minutes)	OSHA Z-2
		TWA	100 ppm 375 mg/m3	OSHA P0
		STEL	150 ppm 560 mg/m3	OSHA P0

# **Biological occupational exposure limits**

Components	CAS-No.	Control parameters	Biological specimen	Sam- pling time	Permissible concentration	Basis
methanol	67-56-1	Methanol	Urine	End of shift (As soon as possible after exposure ceases)	15 mg/l	ACGIH BEI
toluene	108-88-3	Toluene	In blood	Prior to last shift of work- week	0.02 mg/l	ACGIH BEI
		Toluene	Urine	End of shift (As soon as possible	0.03 mg/l	ACGIH BEI

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		after exposure ceases)		
o-Cresol	Urine	End of shift (As soon as possible after exposure ceases)	0.3 mg/g creatinine	ACGIH BEI

**Engineering measures** 

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THE PRODUCT. FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

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

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

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 from 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

according to the OSHA Hazard Communication Standard



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concentration and amount of dangerous substances, and to

the specific work-place.

Remove and wash contaminated clothing before re-use.

Wear as appropriate:

Dust impervious protective suit

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.

### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : solid

Color : yellow to light brown

Odor : None.

Odor Threshold : No data available

pH : 4-8

Concentration: 1 %w/v

Melting point/freezing point : No data available

Initial boiling point and boiling

range

No data available

Flash point : No data available

Evaporation rate : No data available

Flammability (solid, gas) : May form combustible dust concentrations in air.

Burning number :  $2 (68 \degree F / 20 \degree C)$ 

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower :

flammability limit

No data available

Vapor pressure : No data available

Relative vapor density : No data available

Density : 0.54 g/cm3

Solubility(ies)

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

Autoignition temperature

: No data available

according to the OSHA Hazard Communication Standard



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Decomposition temperature : No data available

Minimum ignition temperature : 450 °C

Viscosity

Viscosity, kinematic : No data available

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Minimum ignition energy : 10 - 30 mJ

Particle characteristics

Particle size : No data available

### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : None reasonably foreseeable.
Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

: No decomposition if used as directed.

Incompatible materials : None known.

incompatible materials . None known

Hazardous decomposition

Conditions to avoid

products

No hazardous decomposition products are known.

No dangerous reaction known under conditions of normal use.

### **SECTION 11. TOXICOLOGICAL INFORMATION**

### Information on likely routes of exposure

Ingestion Inhalation Skin contact Eye contact

# **Acute toxicity**

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

**Product:** 

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

Acute inhalation toxicity : LC50 (Rat, male and female): > 4.67 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The component/mixture is minimally toxic after

short term inhalation.

Remarks: Highest attainable concentration

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

Assessment: The substance or mixture has no acute dermal

toxicity

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**Components:** 

Azoxystrobin:

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

Assessment: The substance or mixture has no acute dermal

toxicity

Residues (petroleum), catalytic reformer fractionator, sulfonated, polymers with formalde-

hyde, sodium salts:

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

sulfuric acid, mono-C12-18-alkyl esters, sodium salts:

Acute oral toxicity : LD50 (Rat, male and female): 2,600 mg/kg

methanol:

Acute oral toxicity : Assessment: The component/mixture is toxic after single in-

gestion.

Acute inhalation toxicity : Assessment: The component/mixture is toxic after short term

inhalation.

Acute dermal toxicity : Assessment: The component/mixture is toxic after single con-

tact with skin.

toluene:

Acute oral toxicity : LD50 (Rat, male): 5,580 mg/kg

Acute inhalation toxicity : LC50 (Rat, male): 25.7 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rabbit, male): > 5,000 mg/kg

Skin corrosion/irritation

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

**Product:** 

Species : Rabbit

Result : No skin irritation

**Components:** 

Azoxystrobin:

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**Species** Rabbit

Result No skin irritation

Residues (petroleum), catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts:

**Species** reconstructed human epidermis (RhE)

Result No skin irritation

sulfuric acid, mono-C12-18-alkyl esters, sodium salts:

**Species** Rabbit

Result Irritating to skin.

methanol:

**Species** Rabbit

Result No skin irritation

toluene:

**Species** Rabbit

Result Irritating to skin.

Serious eye damage/eye irritation

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

**Product:** 

**Species** Rabbit

Result No eye irritation

**Components:** 

Azoxystrobin:

**Species** Rabbit

Result No eye irritation

Residues (petroleum), catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts:

Rabbit **Species** 

Result Irritation to eyes, reversing within 21 days

sulfuric acid, mono-C12-18-alkyl esters, sodium salts:

**Species** 

Result Risk of serious damage to eyes.

methanol:

**Species** Rabbit

Result No eye irritation

toluene:

**Species** Rabbit

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Result : No eye irritation

Respiratory or skin sensitization

Skin sensitization

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

Respiratory sensitization

Not classified due to lack of data.

**Product:** 

Test Type : Buehler Test Species : Guinea pig

Result : Does not cause skin sensitization.

**Components:** 

Azoxystrobin:

Species : Guinea pig

Result : Does not cause skin sensitization.

methanol:

Species : Guinea pig

Result : Does not cause skin sensitization.

toluene:

Species : Guinea pig

Result : Does not cause skin sensitization.

Germ cell mutagenicity

Not classified due to lack of data.

Components:

Azoxystrobin:

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

Assessment

sulfuric acid, mono-C12-18-alkyl esters, sodium salts:

Germ cell mutagenicity - : In vitro tests did not show mutagenic effects

Assessment

methanol:

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

Assessment

toluene:

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

Assessment

Carcinogenicity

Not classified due to lack of data.

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**Components:** 

Azoxystrobin:

Carcinogenicity - Assess-

ment

No evidence of carcinogenicity in animal studies.

kaolin:

Carcinogenicity - Assess-

ment

No evidence of carcinogenicity in animal studies.

methanol:

Carcinogenicity - Assess-

ment

No evidence of carcinogenicity in animal studies.

toluene:

Carcinogenicity - Assess-

No evidence of carcinogenicity in animal studies.

ment

IARC Group 1: Carcinogenic to humans

kaolin 1332-58-7

(Silica dust, crystalline)

**OSHA**No component of this product present at levels greater than or equal to 0.1% is

on OSHA's list of regulated carcinogens.

NTP Known to be human carcinogen

kaolin 1332-58-7

(Silica, Crystalline (Respirable Size))

Reproductive toxicity

Suspected of damaging the unborn child.

**Components:** 

Azoxystrobin:

Reproductive toxicity - Assessment

No toxicity to reproduction, No effects on or via lactation

methanol:

Reproductive toxicity - As-

No toxicity to reproduction

sessment

sessment

toluene:

Reproductive toxicity - As-

-

Some evidence of adverse effects on development, based on

animal experiments.

STOT-single exposure

Not classified due to lack of data.

Components:

methanol:

Target Organs : Eyes, Central nervous system

Assessment : The substance or mixture is classified as specific target organ

toxicant, single exposure, category 1.

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toluene:

Routes of exposure Inhalation

Assessment The substance or mixture is classified as specific target organ

toxicant, single exposure, category 3 with narcotic effects.

STOT-repeated exposure

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

Components:

Azoxystrobin:

**Target Organs** Bile duct

The substance or mixture is classified as specific target organ Assessment

toxicant, repeated exposure, category 2.

methanol:

Assessment The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

toluene:

Routes of exposure Inhalation

Target Organs Central nervous system

The substance or mixture is classified as specific target organ Assessment

toxicant, repeated exposure, category 2.

**Aspiration toxicity** 

Not classified due to lack of data.

Components:

toluene:

May be fatal if swallowed and enters airways.

### **SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity** 

**Product:** 

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)): 1.1 mg/l

Exposure time: 96 h

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 0.0018 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

ErC50 (Raphidocelis subcapitata (freshwater green alga)):

0.95 mg/l

Exposure time: 72 h

NOEC (Raphidocelis subcapitata (freshwater green alga)):

0.05 mg/l

End point: Growth rate

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Exposure time: 72 h

**Components:** 

Azoxystrobin:

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

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

Toxicity to fish (Chronic tox-

icity)

NOEC (Oncorhynchus mykiss (rainbow trout)): 0.16 mg/l

Exposure time: 28 d

EC10 (Pimephales promelas (fathead minnow)): 0.2197 mg/l

Exposure time: 33 d

Toxicity to daphnia and other : aquatic invertebrates (Chron-

aquatic invertebrat

ic toxicity)

NOEC (Daphnia magna (Water flea)): 0.044 mg/l

Exposure time: 21 d

NOEC (Americamysis): 0.00954 mg/l

Exposure time: 28 d

Toxicity to microorganisms : IC50 (Pseudomonas putida): > 3.2 mg/l

Exposure time: 6 h

sulfuric acid, mono-C12-18-alkyl esters, sodium salts:

Toxicity to fish : LC50 : 17 mg/l

Exposure time: 96 h Test Type: semi-static test

root rypor commistant t

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 15 mg/l

Exposure time: 48 h Test Type: static test

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Toxicity to algae/aquatic

plants

ErC50 (green algae): 20 mg/l

Exposure time: 72 h

NOEC (green algae): 3 mg/l End point: Growth rate Exposure time: 72 h

Toxicity to fish (Chronic tox-

icity)

NOEC (Fish): 0.11 - 0.35 mg/l

Exposure time: 34 d

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia): 0.419 mg/l

Exposure time: 7 d

Toxicity to microorganisms

EC50 (Bacteria): 680 mg/l

Exposure time: 3 h

toluene:

Toxicity to fish : LC50 (Oncorhynchus kisutch (coho salmon)): 5.5 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Ceriodaphnia dubia (water flea)): 3.78 mg/l

Exposure time: 48 h

Toxicity to fish (Chronic tox-

icity)

NOEC (Oncorhynchus kisutch (coho salmon)): 1.39 mg/l

Exposure time: 40 d

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Ceriodaphnia dubia (Water flea)): 0.74 mg/l

Exposure time: 7 d

Persistence and degradability

Components:

Azoxystrobin:

Biodegradability : Result: Not readily biodegradable.

Stability in water : Degradation half life: 224 d

Remarks: Persistent in water.

Residues (petroleum), catalytic reformer fractionator, sulfonated, polymers with formalde-

hyde, sodium salts:

Biodegradability : Result: Not readily biodegradable.

sulfuric acid, mono-C12-18-alkyl esters, sodium salts:

Biodegradability : Result: Readily biodegradable.

toluene:

Biodegradability : Result: Readily biodegradable.

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**Bioaccumulative potential** 

Components:

Azoxystrobin:

Bioaccumulation : Remarks: Does not bioaccumulate.

toluene:

Bioaccumulation : Remarks: Does not bioaccumulate.

Mobility in soil

**Components:** 

Azoxystrobin:

Distribution among environ-

mental compartments

Stability in soil : Dissipation time: 81.3 d

Percentage dissipation: 50 % (DT50)

Remarks: Product is not persistent.

Remarks: Low mobility in soil.

Other adverse effects

Components:

Azoxystrobin: Results of PBT and vPvB

assessment

Substance is not persistent, bioaccumulative, and toxic (PBT).

Substance is not very persistent and very bioaccumulative

(vPvB).

methanol:

Results of PBT and vPvB

assessment

Substance is not persistent, bioaccumulative, and toxic (PBT).

Substance is not very persistent and very bioaccumulative

(vPvB).

toluene:

Results of PBT and vPvB

assessment

Substance is not persistent, bioaccumulative, and toxic (PBT).

Substance is not very persistent and very bioaccumulative

(vPvB).

**SECTION 13. DISPOSAL CONSIDERATIONS** 

**Disposal methods** 

Waste from residues : 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.

This product will not be classified as a RCRA characteristic

hazardous waste when discarded.

according to the OSHA Hazard Communication Standard



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Contaminated packaging Empty remaining contents.

Triple rinse containers.

Empty containers should be taken to an approved waste

handling site for recycling or disposal. Do not re-use empty containers.

### **SECTION 14. TRANSPORT INFORMATION**

### International Regulations

**UNRTDG** 

**UN** number UN 3077

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(AZOXYSTROBIN)

Class 9 Ш Packing group 9 Labels Environmentally hazardous yes

This product can be subject to exemptions when packaged in Remarks

> 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.

**IATA-DGR** 

UN/ID No. UN 3077

Environmentally hazardous substance, solid, n.o.s. Proper shipping name

(AZOXYSTROBIN)

9 Class Packing group Ш

Miscellaneous Labels

Packing instruction (cargo 956

aircraft)

Packing instruction (passen-

956

ger aircraft)

Environmentally hazardous 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.

**IMDG-Code** 

**UN** number UN 3077

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(AZOXYSTROBIN)

9 Class Ш Packing group Labels 9 F-A, S-F **EmS Code** Marine pollutant

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.

according to the OSHA Hazard Communication Standard



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

Not applicable for product as supplied.

### **Domestic regulation**

### **49 CFR**

Not regulated as a dangerous good

Remarks : Shipment by ground under DOT is non-regulated; however it

may be shipped per the applicable hazard classification to facilitate multi-modal transport involving ICAO (IATA) or IMO.

## Special precautions for user

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.

### **SECTION 15. REGULATORY INFORMATION**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label: Caution

Harmful if absorbed through skin.

Causes moderate eye irritation.

Avoid contact with skin, eyes or clothing.

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Remove and wash contaminated clothing before re-use.

### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Combustible dust

Reproductive toxicity

Specific target organ toxicity (single or repeated exposure)

SARA 313 : This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

# California Prop. 65

WARNING: This product can expose you to chemicals including kaolin, which is/are known to the State of California to cause cancer, and

methanol, toluene, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

### **California Regulated Carcinogens**

kaolin 1332-58-7

according to the OSHA Hazard Communication Standard



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### **SECTION 16. OTHER INFORMATION**

### **Further information**

### **NFPA 704:**

# Health 1 0 Instability

Special hazard

### HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI : ACGIH - Biological Exposure Indices (BEI)
NIOSH REL : USA. NIOSH Recommended Exposure Limits

OSHA P0 : USA. Table Z-1-A Limits for Air Contaminants (1989 vacated

values)

OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim-

its for Air Contaminants

OSHA Z-2 : USA. Occupational Exposure Limits (OSHA) - Table Z-2

Syngenta : Syngenta Occupational Exposure Limits

ACGIH / TWA : 8-hour, time-weighted average ACGIH / STEL : Short-term exposure limit

NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour

workday during a 40-hour workweek

NIOSH REL / ST : STEL - 15-minute TWA exposure that should not be exceeded

at any time during a workday

OSHA P0 / TWA : 8-hour time weighted average
OSHA P0 / STEL : Short-term exposure limit
OSHA Z-1 / TWA : 8-hour time weighted average
OSHA Z-2 / TWA : 8-hour time weighted average
OSHA Z-2 / CEIL : Acceptable ceiling concentration

OSHA Z-2 / Peak : Acceptable maximum peak above the acceptable ceiling con-

centration for an 8-hr shift

Syngenta / TWA : Time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Haz-

according to the OSHA Hazard Communication Standard



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ardous Substance; 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; HMIS - Hazardous Materials Identification System; 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; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate: 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; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; 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

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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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