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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : AMISTAR OPTI

Design code : A13666B

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the : Fungicide

Substance/Mixture

1.3 Details of the supplier of the safety data sheet

Company : Syngenta SA (Pty) Ltd

P.O. Box 1044, No. 4 Krokodildrift Avenue

Brits 0250 South Africa

Telephone : +27 (0)12 2506 300

Telefax : -

E-mail address of person

responsible for the SDS

: sds.ame@syngenta.com

1.4 Emergency telephone number

Emergency telephone : +27 (0) 82 446 8946 (Griffon)

number

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 2 H330: Fatal if inhaled.

Serious eye damage, Category 1

Skin sensitisation, Category 1

Carcinogenicity, Category 2

Specific target organ toxicity - single

H318: Causes serious eye damage.

H317: May cause an allergic skin reaction.

H351: Suspected of causing cancer.

H335: May cause respiratory irritation.

exposure, Category 3, Respiratory

system

Short-term (acute) aquatic hazard, H400: Very toxic to aquatic life.

Category 1

Long-term (chronic) aquatic hazard, H410: Very toxic to aquatic life with long lasting

Category 1 effects.



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2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :









Signal word : Danger

Hazard statements : H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

H335 May cause respiratory irritation.H351 Suspected of causing cancer.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : Prevention:

P260 Do not breathe mist or vapours.

P280 Wear protective gloves/ protective clothing/ eye

protection/ face protection/ hearing protection.

Response:

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a

POISON CENTER/ doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a

POISON CENTER/ doctor. P391 Collect spillage.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container

tightly closed.

Hazardous components which must be listed on the label:

chlorothalonil (ISO) azoxystrobin (ISO)

1,2-benzisothiazol-3(2H)-one

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.



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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
chlorothalonil (ISO)	1897-45-6 217-588-1 608-014-00-4 01-2120878537-37	Acute Tox. 2; H330 Eye Dam. 1; H318 Skin Sens. 1; H317 Carc. 2; H351 STOT SE 3; H335 (Respiratory system) Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10	>= 30 - < 50
azoxystrobin (ISO)	131860-33-8 607-256-00-8	Acute Tox. 3; H331 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10	>= 2,5 - < 10
1,2-benzisothiazol-3(2H)-one	2634-33-5 220-120-9 613-088-00-6 01-2120761540-60	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 2; H411 M-Factor (Acute aquatic toxicity): 1	>= 0,0025 - < 0,025

For explanation of abbreviations see section 16.



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SECTION 4: First aid measures

4.1 Description of 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. 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.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Nonspecific

No symptoms known or expected.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : There is no specific antidote available.

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

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.



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5.2 Special hazards arising from the substance or mixture

Specific hazards during

firefighting

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.

5.3 Advice for firefighters

Special protective equipment :

for firefighters

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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 Environmental precautions

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.

6.3 Methods and material for containment and cleaning up

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

Retain and dispose of contaminated wash water.

6.4 Reference to other sections

For disposal considerations see section 13., Refer to protective measures listed in sections 7 and 8.

SECTION 7: Handling and storage

7.1 Precautions for safe 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.



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7.2 Conditions for safe storage, including any incompatibilities

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 feedingstuffs.

7.3 Specific end use(s)

Specific use(s) : For proper and safe use of this product, please refer to the

approval conditions laid down on the product label.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form	Control parameters	Basis
		of exposure)		
chlorothalonil (ISO)	1897-45-6	TWA	0,1 mg/m3	Syngenta
azoxystrobin (ISO)	131860-33-	TWA	4 mg/m3	Syngenta
	8			
propane-1,2-diol	57-55-6	TWA OEL-RL	10 mg/m3	ZA OEL
		(particulate)		
	Further information: Recommended Limit			
		TWA OEL-RL	150 ppm	ZA OEL
		(Vapour +	470 mg/m3	
		particulates)		
Further information: Recommended Limit				

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
propane-1,2-diol	Workers	Inhalation	Long-term systemic effects	168 mg/m3
	Consumers	Inhalation	Long-term local effects	10 mg/m3
	Consumers	Inhalation	Long-term systemic effects	30 mg/m3
	Workers	Inhalation	Long-term local effects	10 mg/m3
1,2-benzisothiazol- 3(2H)-one	Workers	Inhalation	Long-term systemic effects	6,81 mg/m3
	Workers	Dermal	Long-term systemic effects	0,966 mg/kg
	Consumers	Inhalation	Long-term systemic effects	1,2 mg/m3
	Consumers	Dermal	Long-term systemic effects	0,345 mg/kg



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Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
propane-1,2-diol	Fresh water	260 mg/l
	Marine water	26 mg/l
	Intermittent use/release	183 mg/l
	Sewage treatment plant	20000 mg/l
	Marine sediment	57,2 mg/kg
	Fresh water sediment	572 mg/kg
	Soil	50 mg/kg
1,2-benzisothiazol-3(2H)-one	Fresh water	0,00403 mg/l
	Marine water	0,000403 mg/l
	Sewage treatment plant	1,03 mg/l
	Fresh water sediment	0,0499 mg/kg
	Marine sediment	0,00499 mg/kg
	Freshwater - intermittent	0,0011 mg/l
	Marine water - intermittent	0,000110 mg/l
	Soil	3 mg/kg

8.2 Exposure controls

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. Seek additional occupational hygiene advice.

Personal protective equipment

Eye protection : Always wear eye protection when the potential for inadvertent

eye contact with the product cannot be excluded.

Tightly fitting safety goggles

Face-shield

Hand protection

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



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replaced if there is any indication of degradation or chemical

breakthrough.

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

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-

contained breathing apparatus must be used.

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

9.1 Information on basic physical and chemical properties

Appearance : suspension

Colour : light yellow to greyish yellow

Odour : No data available
Odour Threshold : No data available

pH : 6,7 (20 - 25 °C)

Concentration: 100 % w/v

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : Method: Seta closed cup

does not flash

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



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: No data available Vapour pressure

Relative vapour density No data available

Density 1,28 - 1,32 g/cm3 (20 °C)

Solubility(ies)

Water solubility No data available Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

: > 650 °C Auto-ignition temperature

Decomposition temperature No data available

Viscosity

Viscosity, kinematic No data available

: Not explosive Explosive properties

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

9.2 Other information

Particle size : No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

None reasonably foreseeable.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : No decomposition if used as directed.

10.5 Incompatible materials

Materials to avoid : None known.

10.6 Hazardous decomposition products

Hazardous decomposition

products

: No hazardous decomposition products are known.



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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on likely routes of:

exposure

Ingestion
Inhalation
Skin contact
Eye contact

Acute toxicity

Product:

Acute inhalation toxicity : Acute toxicity estimate: 0,2136 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.

Components:

chlorothalonil (ISO):

Acute oral toxicity : LD50 (Rat, male and female): > 5.000 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): 0,10 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat, male and female): > 5.000 mg/kg

azoxystrobin (ISO):

Acute oral toxicity : LD50 (Rat, male and female): > 5.000 mg/kg

Acute inhalation toxicity : LC50 (Rat, female): 0,7 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Acute toxicity estimate: 0,7 mg/l Test atmosphere: dust/mist

Method: Acute toxicity estimate according to Regulation (EC)

No. 1272/2008

Acute dermal toxicity : LD50 (Rat, male and female): > 2.000 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

1,2-benzisothiazol-3(2H)-one:

Acute oral toxicity : LD50 (Rat, male): 670 mg/kg

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

Components:

chlorothalonil (ISO):

Species : Rabbit

Result : No skin irritation

azoxystrobin (ISO):

Species : Rabbit

Result : No skin irritation

1,2-benzisothiazol-3(2H)-one:

Species : Rabbit

Result : Mild skin irritation

Serious eye damage/eye irritation

Components:

chlorothalonil (ISO):

Species : Rabbit

Result : Risk of serious damage to eyes.

azoxystrobin (ISO):

Species : Rabbit

Result : No eye irritation

1,2-benzisothiazol-3(2H)-one:

Species : Rabbit

Result : Risk of serious damage to eyes.

Respiratory or skin sensitisation

Components:

chlorothalonil (ISO):

Species : Guinea pig

Result : May cause sensitisation by skin contact.

Remarks : In very rare cases may cause an allergic response of the

respiratory system.

azoxystrobin (ISO):

Species : Guinea pig

Result : Did not cause sensitisation on laboratory animals.



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1,2-benzisothiazol-3(2H)-one:

Result : Probability or evidence of skin sensitisation in humans

Germ cell mutagenicity

Components:

chlorothalonil (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.

1,2-benzisothiazol-3(2H)-one:

Germ cell mutagenicity-

Assessment

Weight of evidence does not support classification as a germ

cell mutagen.

Carcinogenicity

Components:

chlorothalonil (ISO):

Carcinogenicity - Assessment Chlorothalonil causes kidney tumours in rats and mice via a non-gentoxic mode of action secondary to target organ

toxicity.

,Limited evidence of carcinogenicity in animal studies

azoxystrobin (ISO):

Carcinogenicity - Assessment No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Components:

chlorothalonil (ISO):

Reproductive toxicity -

: No toxicity to reproduction

Assessment

azoxystrobin (ISO):

Reproductive toxicity - :

No toxicity to reproduction

Assessment

STOT - single exposure

Components:

chlorothalonil (ISO):

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



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toxicant, single exposure, category 3 with respiratory tract

irritation.

STOT - repeated exposure

Components:

azoxystrobin (ISO):

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

chlorothalonil (ISO):

Remarks : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

SECTION 12: Ecological information

12.1 Toxicity

Components:

chlorothalonil (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0,039 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0,07 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

ErC50 (Navicula pelliculosa (Freshwater diatom)): 0,02 mg/l

Exposure time: 96 h

NOEC (Navicula pelliculosa (Freshwater diatom)): 0,0035 mg/l

End point: Growth rate Exposure time: 96 h

ErC50 (Skeletonema costatum (marine diatom)): 0,017 mg/l

Exposure time: 96 h

NOEC (Skeletonema costatum (marine diatom)): 0,012 mg/l

End point: Growth rate Exposure time: 96 h

M-Factor (Acute aquatic

toxicity)

: 10

Toxicity to fish (Chronic

toxicity)

NOEC: 0,003 mg/l Exposure time: 297 d



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Species: Pimephales promelas (fathead minnow)

Toxicity to daphnia and other :

aquatic invertebrates
(Chronic toxicity)

NOEC: 0,035 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

NOEC: 0,00083 mg/l Exposure time: 28 d Species: Americamysis

M-Factor (Chronic 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

EC50 (Americamysis): 0,055 mg/l

Exposure time: 96 h

Toxicity to algae/aquatic

plants

ErC50 (Raphidocelis subcapitata (freshwater green alga)): 2

mg/l

Exposure time: 96 h

NOEC (Raphidocelis subcapitata (freshwater green alga)):

0,038 mg/l

End point: Growth rate Exposure time: 96 h

ErC50 (Navicula pelliculosa (Freshwater diatom)): 0,301 mg/l

Exposure time: 96 h

NOEC (Navicula pelliculosa (Freshwater diatom)): 0,02 mg/l

End point: Growth rate Exposure time: 96 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)

NOEC: 0,147 mg/l Exposure time: 33 d

Species: Pimephales promelas (fathead minnow)



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Toxicity to daphnia and other : NOEC: 0,044 mg/l

aquatic invertebrates (Chronic toxicity)

Exposure time: 21 d

Species: Daphnia magna (Water flea)

NOEC: 0,0095 mg/l Exposure time: 28 d Species: Americamysis

M-Factor (Chronic aquatic

toxicity)

10

1,2-benzisothiazol-3(2H)-one:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2,18 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 2,94 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

ErC50 (Raphidocelis subcapitata (freshwater green alga)):

0,15 mg/l

Exposure time: 72 h

EC10 (Raphidocelis subcapitata (freshwater green alga)):

0,04 mg/l

End point: Growth rate Exposure time: 72 h

M-Factor (Acute aquatic

toxicity)

: 1

Toxicity to fish (Chronic

toxicity)

: NOEC: 0,3 mg/l

Exposure time: 28 d

Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other :

aquatic invertebrates (Chronic toxicity)

NOEC: 1,7 mg/l Exposure time: 21 d

Species: Daphnia (water flea)

12.2 Persistence and degradability

Components:

chlorothalonil (ISO):

Stability in water : Degradation half life: < 5 d (20 °C)

Remarks: Product is not persistent.

azoxystrobin (ISO):

Biodegradability : Result: Not readily biodegradable.

Stability in water : Degradation half life: 214 d

Remarks: The substance is stable in water.



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1,2-benzisothiazol-3(2H)-one:

Biodegradability : Result: rapidly degradable

12.3 Bioaccumulative potential

Components:

chlorothalonil (ISO):

Bioaccumulation : Remarks: Low bioaccumulation potential.

Partition coefficient: n-

octanol/water

: log Pow: 2,94 (25 °C)

azoxystrobin (ISO):

Bioaccumulation : Remarks: Does not bioaccumulate.

1,2-benzisothiazol-3(2H)-one:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

12.4 Mobility in soil

Components:

chlorothalonil (ISO):

Distribution among

Remarks: Chlorothalonil has low to slight mobility in soil.

environmental compartments

Stability in soil : Dissipation time: 7 d

Percentage dissipation: 50 % (DT50) Remarks: Product is not persistent.

azoxystrobin (ISO):

Distribution among

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

environmental compartments

Stability in soil : Dissipation time: 80 d

Percentage dissipation: 50 % (DT50) Remarks: Product is not persistent.

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

Components:

chlorothalonil (ISO):

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).



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azoxystrobin (ISO):

Assessment : This substance is not considered to be persistent,

bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating

(vPvB).

1,2-benzisothiazol-3(2H)-one:

Assessment : This substance is not considered to be persistent,

bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating

(vPvB).

12.6 Other adverse effects

Product:

Endocrine disrupting

potential

The substance/mixture does not contain components

considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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 to an approved waste

handling site for recycling or disposal.

Do not re-use empty containers.

SECTION 14: Transport information

14.1 UN number

IMDG : UN 3082 IATA : UN 3082



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14.2 UN proper shipping name

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(AZOXYSTROBIN AND CHLOROTHALONIL)

IATA : Environmentally hazardous substance, liquid, n.o.s.

(AZOXYSTROBIN AND CHLOROTHALONIL)

14.3 Transport hazard class(es)

IMDG : 9 **IATA** : 9

14.4 Packing group

IMDG

Packing group : III Labels : 9

EmS Code : F-A, S-F

IATA (Cargo)

Packing instruction (cargo : 964

aircraft)

Packing instruction (LQ) : Y964
Packing group : III

Labels : Miscellaneous

IATA (Passenger)

Packing instruction : 964

(passenger aircraft)

Packing instruction (LQ) : Y964
Packing group : III

Labels : Miscellaneous

14.5 Environmental hazards

IMDG

Marine pollutant : yes

IATA (Passenger)

Environmentally hazardous : yes

IATA (Cargo)

Environmentally hazardous : yes

14.6 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.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.



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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Other regulations:

None known.

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

SECTION 16: Other information

Full text of H-Statements

H302 : Harmful if swallowed. H315 : Causes skin irritation.

H317 : May cause an allergic skin reaction.

H318 : Causes serious eye damage.

H330 : Fatal if inhaled. H331 : Toxic if inhaled.

H335 : May cause respiratory irritation.
H351 : Suspected of causing cancer.
H400 : Very toxic to aquatic life.

H410 : Very toxic to aquatic life with long lasting effects.H411 : Toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Acute : Short-term (acute) aquatic hazard
Aquatic Chronic : Long-term (chronic) aquatic hazard

Carc. : Carcinogenicity

Eye Dam. : Serious eye damage

Skip Irrit : Skip irritation

Skin Irrit. : Skin irritation
Skin Sens. : Skin sensitisation

STOT SE : Specific target organ toxicity - single exposure

ZA OEL : South Africa. Hazardous Chemical Substances Regulations,

Occupational Exposure Limits

ZA OEL / TWA OEL-RL : Long term occupational exposure limits - recommended limit

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; 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; GHS - Globally Harmonized System;



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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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; RID -Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; 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

Further information

Classification of the mixture: Classification procedure:

Acute Tox. 2	H330	Calculation method
Eye Dam. 1	H318	Calculation method
Skin Sens. 1	H317	Calculation method
Carc. 2	H351	Calculation method
STOT SE 3	H335	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 1	H410	Calculation method

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

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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