

**SWITCH** 

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

1.1 Product identifier

Trade name SWITCH

Design code A9219B

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

Use of the Sub-

stance/Mixture

: Fungicide

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 num-

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

ber

## **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

## Classification (REGULATION (EC) No 1272/2008)

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

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

Long-term (chronic) aquatic hazard, Cat-

egory 1

H410: Very toxic to aquatic life with long lasting

effects.

#### 2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms

Signal word Warning

Hazard statements May cause an allergic skin reaction. H317

Very toxic to aquatic life with long lasting effects.



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Precautionary statements : P102 Keep out of reach of children.

Prevention:

P261 Avoid breathing dust. P280 Wear protective gloves.

Response:

P333 + P313 If skin irritation or rash occurs: Get medical

advice/ attention.

P362 + P364 Take off contaminated clothing and wash it

before reuse.

P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

Hazardous components which must be listed on the label: cyprodinil (ISO)

#### 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.

May form combustible dust concentrations in air.

# **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

### Components

| Chemical name     | CAS-No.<br>EC-No.<br>Index-No.<br>Registration number | Classification   | Concentration<br>(% w/w) |
|-------------------|---|--|--------------------------|
| cyprodinil (ISO)  | 121552-61-2<br>612-242-00-X                           | Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 ——— M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10 | >= 30 - < 50             |
| fludioxonil (ISO) | 131341-86-1<br>608-069-00-4                           | Aquatic Acute 1; H400 Aquatic Chronic 1; H410 ——— M-Factor (Acute aquatic toxicity): 1   | >= 25 - < 30             |



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|   |                           | M-Factor (Chronic aquatic toxicity): 10  |            |
|---|---------------------------|--|------------|
| reaction product of naphthalene,<br>butanol, sulfonated and neutralized | Not Assigned              | Acute Tox. 4; H302<br>Acute Tox. 4; H332 | >= 1 - < 3 |
| by caustic soda   | 01-2119980979-09-<br>xxxx | Eye Dam. 1; H318<br>STOT SE 3; H335      |            |
|   |                           | (Respiratory system)                     |            |

For explanation of abbreviations see section 16.

## **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 respira-

tion.

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



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Use water spray, alcohol-resistant foam, dry chemical or car-

bon 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.

#### 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

Fire will spread by burning with a visible flame.

As the product contains combustible organic components, fire will produce dense black smoke containing hazardous prod-

ucts 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 ap-

paratus.

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.

Avoid dust formation.

## 6.2 Environmental precautions

Environmental precautions : 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, pick up with an electrically protected vacuum

cleaner or by wet-brushing and transfer to a container for dis-

posal according to local regulations (see section 13).

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

air.

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.



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## **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

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 flamma-

ble solvents.

This material can become readily charged in most operations.

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

# 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Keep containers tightly closed in a dry, cool and wellventilated 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 of exposure) | Control parameters | Basis    |
|-------------------|-----------------|-------------------------------|--------------------|----------|
| cyprodinil (ISO)  | 121552-61-<br>2 | TWA                           | 5 mg/m3            | Syngenta |
| fludioxonil (ISO) | 131341-86-<br>1 | TWA                           | 5 mg/m3            | Syngenta |

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

| Substance name   | End Use   | Exposure routes | Potential health ef-       | Value       |
|--|-----------|-----------------|----------------------------|-------------|
|  |           |                 | fects                      |             |
| sodium sulphate  | Workers   | Inhalation      | Systemic effects           | 20 mg/m3    |
|  | Workers   | Inhalation      | Local effects              | 20 mg/m3    |
|  | Consumers | Inhalation      | Systemic effects           | 12 mg/m3    |
|  | Consumers | Inhalation      | Local effects              | 12 mg/m3    |
| reaction product of<br>naphthalene, butanol,<br>sulfonated and neu-<br>tralized by caustic | Workers   | Inhalation      | Long-term systemic effects | 0,549 mg/m3 |



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| soda |           |            |                              |             |
|------|-----------|------------|------------------------------|-------------|
|      | Workers   | Inhalation | Long-term local ef-<br>fects | 0,36 mg/m3  |
|      | Workers   | Dermal     | Long-term systemic effects   | 1,057 mg/kg |
|      | Consumers | Inhalation | Long-term systemic effects   | 0,137 mg/m3 |
|      | Consumers | Inhalation | Long-term local ef-<br>fects | 0,18 mg/m3  |
|      | Consumers | Dermal     | Long-term systemic effects   | 0,528 mg/kg |
|      | Consumers | Oral       | Long-term systemic effects   | 0,528 mg/kg |

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

| Substance name   | Environmental Compartment | Value                           |
|--|---------------------------|---------------------------------|
| sodium sulphate  | Fresh water               | 11,09 mg/l                      |
|  | Freshwater - intermittent | 17,66 mg/l                      |
|  | Marine water              | 1,109 mg/l                      |
|  | Sewage treatment plant    | 800 mg/l                        |
|  | Fresh water sediment      | 40,2 mg/kg dry<br>weight (d.w.) |
|  | Marine sediment           | 4,02 mg/kg dry<br>weight (d.w.) |
|  | Soil                      | 1,54 mg/kg dry<br>weight (d.w.) |
| reaction product of naphthalene,<br>butanol, sulfonated and neutral-<br>ized by caustic soda | Fresh water               | 0,2 mg/l                        |
| _  | Freshwater - intermittent | 2 mg/l                          |
|  | Marine water              | 0,02 mg/l                       |
|  | Sewage treatment plant    | 0,016 mg/l                      |
|  | Fresh water sediment      | 5,4 mg/kg                       |
|  | Marine sediment           | 0,54 mg/kg                      |
|  | Soil                      | 0,12 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. Where necessary, seek additional occupational hygiene advice.

# Personal protective equipment

Eye/face protection

No special protective equipment required.

Hand protection

Material : Nitrile rubber
Break through time : > 480 min
Glove thickness : 0,5 mm



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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.

Skin and body protection : Choose body protection in relation to its type, to the concen-

tration and amount of dangerous substances, and to the spe-

cific work-place.

Remove and wash contaminated clothing before re-use.

Wear as appropriate:

Dust impervious protective suit

Respiratory protection : No personal respiratory protective equipment normally re-

quired.

When workers are facing concentrations above the exposure

limit they must use appropriate certified respirators.

Protective measures : The use of technical measures should always have priority

over the use of personal protective equipment.

When selecting personal protective equipment, seek appro-

priate professional advice.

#### **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

Appearance : granules
Colour : grey to brown

Odour : weak

Odour Threshold : No data available

pH : 9,6

Concentration: 1 %w/v

Melting point/range : No data available

Boiling point/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 : 5 (20 °C)

6 (100 °C)



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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 g/cm3

Bulk density : 0,537 g/cm3

Solubility(ies)

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

Partition coefficient: n-

: No data available

octanol/water

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, kinematic : No data available

Explosive properties : Not explosive

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

9.2 Other information

Minimum ignition temperature : 600 °C

Self-heating substances : The substance or mixture is not classified as self heating.

Minimum ignition energy : 30 - 100 mJ

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.



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10.5 Incompatible materials

Materials to avoid : None known.

10.6 Hazardous decomposition products

Hazardous decomposition

products

: No hazardous decomposition products are known.

**SECTION 11: Toxicological information** 

11.1 Information on toxicological effects

Information on likely routes of : Ingestion

exposure Inhalation
Skin contact

Eye contact

**Acute toxicity** 

**Product:** 

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

Acute inhalation toxicity : LC50 (Rat, male and female): > 2,51 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The substance or mixture has no acute inhala-

tion toxicity

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

Assessment: The substance or mixture has no acute dermal

toxicity

**Components:** 

cyprodinil (ISO):

Acute oral toxicity : LD50 (Rat, female): 2.500 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 1,2 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The substance or mixture has no acute inhala-

tion toxicity

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

Assessment: The substance or mixture has no acute dermal

toxicity

fludioxonil (ISO):

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

Acute inhalation toxicity : LC50 (Rat, male and female): > 2,6 mg/l

Exposure time: 4 h



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Test atmosphere: dust/mist

Assessment: The substance or mixture has no acute inhala-

tion toxicity

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

Assessment: The substance or mixture has no acute dermal

toxicity

reaction product of naphthalene, butanol, sulfonated and neutralized by caustic soda:

Acute oral toxicity : LD50 (Rat): 1.800 mg/kg

Acute inhalation toxicity : LC50 (Rat): 4,08 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): 3.000 mg/kg

Skin corrosion/irritation

**Product:** 

Species : Rabbit

Result : No skin irritation

**Components:** 

cyprodinil (ISO):

Species : Rabbit

Result : No skin irritation

fludioxonil (ISO):

Species : Rabbit

Result : No skin irritation

Serious eye damage/eye irritation

**Product:** 

Species : Rabbit

Result : No eye irritation

**Components:** 

cyprodinil (ISO):

Species : Rabbit

Result : No eye irritation

fludioxonil (ISO):

Species : Rabbit

Result : No eye irritation

reaction product of naphthalene, butanol, sulfonated and neutralized by caustic soda:



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Species : Rabbit

Result : Risk of serious damage to eyes.

Respiratory or skin sensitisation

**Product:** 

Species : Guinea pig

Result : May cause sensitisation by skin contact.

**Components:** 

cyprodinil (ISO):

Species : Guinea pig

Result : The product is a skin sensitiser, sub-category 1B.

fludioxonil (ISO):

Species : Guinea pig

Result : Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

**Components:** 

cyprodinil (ISO):

Germ cell mutagenicity- As-

sessment

: Animal testing did not show any mutagenic effects.

fludioxonil (ISO):

Germ cell mutagenicity- As-

sessment

Animal testing did not show any mutagenic effects.

reaction product of naphthalene, butanol, sulfonated and neutralized by caustic soda:

Germ cell mutagenicity- As-

sessment

: In vitro tests did not show mutagenic effects

Carcinogenicity

**Components:** 

cyprodinil (ISO):

fludioxonil (ISO):

Carcinogenicity - Assess-

S-

No evidence of carcinogenicity in animal studies.

ment

Carcinogenicity - Assess-

Carcinogenicity - Asse

ment

No evidence of carcinogenicity in animal studies.

Reproductive toxicity

**Components:** 

cyprodinil (ISO):

Reproductive toxicity - As-

sessment

No toxicity to reproduction



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fludioxonil (ISO):

Reproductive toxicity - As-

sessment

No toxicity to reproduction

STOT - single exposure

**Components:** 

reaction product of naphthalene, butanol, sulfonated and neutralized by caustic soda:

Assessment The substance or mixture is classified as specific target organ

toxicant, single exposure, category 3 with respiratory tract

irritation.

STOT - repeated exposure

**Components:** 

cyprodinil (ISO):

The substance or mixture is not classified as specific target Assessment

organ toxicant, repeated exposure.

fludioxonil (ISO):

Assessment The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

**SECTION 12: Ecological information** 

12.1 Toxicity

**Product:** 

LC50 (Oncorhynchus mykiss (rainbow trout)): 3,1 mg/l Toxicity to fish

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0,14 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

ErC50 (Desmodesmus subspicatus (green algae)): 1,6 mg/l

Exposure time: 72 h

NOEC (Desmodesmus subspicatus (green algae)): 0,1 mg/l

End point: Growth rate Exposure time: 72 h

Toxicity to fish (Chronic tox-

icity)

NOEC: 0,32 mg/l

Exposure time: 21 d

Species: Oncorhynchus mykiss (rainbow trout)

Test Type: flow-through test

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC: 0,01 mg/l Exposure time: 22 d

Species: Daphnia magna (Water flea)



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**Components:** 

cyprodinil (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2,41 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0,033 mg/l

Exposure time: 48 h

LC50 (Americamysis): 0,0081 mg/l

Exposure time: 96 h

Toxicity to algae/aquatic

plants

ErC50 (Raphidocelis subcapitata (freshwater green alga)): 5,2

mg/

Exposure time: 72 h

NOEC (Raphidocelis subcapitata (freshwater green alga)): 0,4

mg/l

End point: Growth rate Exposure time: 72 h

EC50 (Skeletonema costatum (marine diatom)): 1,78 mg/l

Exposure time: 72 h

NOEC (Skeletonema costatum (marine diatom)): 0,541 mg/l

Exposure time: 72 h

M-Factor (Acute aquatic tox-

icity)

10

Toxicity to microorganisms : EC50 (activated sludge): > 100 mg/l

Exposure time: 3 h

Toxicity to fish (Chronic tox-

icity)

NOEC: 0,0406 mg/l Exposure time: 34 d

Species: Cyprinodon variegatus (sheepshead minnow)

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 0,0082 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

NOEC: 0,0019 mg/l Exposure time: 28 d Species: Americamysis

M-Factor (Chronic aquatic

toxicity)

10

fludioxonil (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0,23 mg/l

Exposure time: 96 h

LC50 (Pimephales promelas (fathead minnow)): 0,7 mg/l

Exposure time: 96 h



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Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0,4 mg/l

Exposure time: 48 h

EC50 (Americamysis): 0,27 mg/l

Exposure time: 96 h

Toxicity to algae/aquatic

plants

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

0,259 mg/l

Exposure time: 96 h

EC10 (Raphidocelis subcapitata (freshwater green alga)):

0,077 mg/l

End point: Growth rate Exposure time: 96 h

ErC50 (Skeletonema costatum (marine diatom)): 0,43 mg/l

Exposure time: 96 h

NOEC (Skeletonema costatum (marine diatom)): 0,14 mg/l

End point: Growth rate Exposure time: 96 h

M-Factor (Acute aquatic tox-

icity)

: 1

M-Factor=1 used for transport classification

Toxicity to microorganisms : EC50 (activated sludge): > 1.000 mg/l

Exposure time: 3 h

Toxicity to fish (Chronic tox-

icity)

NOEC: 0,04 mg/l

Exposure time: 28 d

Species: Oncorhynchus mykiss (rainbow trout)

EC10: 0,018 mg/l Exposure time: 116 d

Species: Pimephales promelas (fathead minnow)

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

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

Species: Daphnia magna (Water flea)

NOEC: 0,018 mg/l Exposure time: 28 d Species: Americamysis

M-Factor (Chronic aquatic

toxicity)

10

M-Factor=1 used for transport classification

reaction product of naphthalene, butanol, sulfonated and neutralized by caustic soda:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 100 mg/l

Exposure time: 96 h

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): > 100 mg/l



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aquatic invertebrates Exposure time: 48 h

Remarks: Information given is based on data obtained from

similar substances.

Toxicity to algae/aquatic

plants

EC50 (Raphidocelis subcapitata (freshwater green alga)): >

200 mg/l

Exposure time: 72 h

Remarks: Information given is based on data obtained from

similar substances.

## 12.2 Persistence and degradability

**Components:** 

cyprodinil (ISO):

Biodegradability : Result: Not readily biodegradable.

Stability in water : Degradation half life: 141 d

Remarks: Product is not persistent.

fludioxonil (ISO):

Biodegradability : Result: Not readily biodegradable.

Stability in water : Degradation half life: 450 - 700 d

Remarks: Persistent in water.

reaction product of naphthalene, butanol, sulfonated and neutralized by caustic soda:

Biodegradability : Result: Readily biodegradable.

Remarks: Information given is based on data obtained from

similar substances.

12.3 Bioaccumulative potential

**Components:** 

cyprodinil (ISO):

Bioaccumulation : Remarks: Does not bioaccumulate.

Partition coefficient: n-

octanol/water

log Pow: 4,0 (25 °C)

fludioxonil (ISO):

Bioaccumulation : Remarks: Does not bioaccumulate.

Partition coefficient: n-

octanol/water

: log Pow: 4,12 (25 °C)

12.4 Mobility in soil

**Components:** 

cyprodinil (ISO):

Distribution among environ-

mental compartments

Remarks: Cyprodinil has low to slight mobility in soil.



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> Stability in soil Dissipation time: 49 d

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

fludioxonil (ISO):

Distribution among environ-

Remarks: immobile mental compartments

Stability in soil Dissipation time: 14 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:** 

cyprodinil (ISO):

Assessment This substance is not considered to be persistent, bioaccumu-

lating and toxic (PBT).. This substance is not considered to be

very persistent and very bioaccumulating (vPvB).

fludioxonil (ISO):

Assessment This substance is not considered to be persistent, bioaccumu-

lating and toxic (PBT).. This substance is not considered to be

very persistent and very bioaccumulating (vPvB).

## 12.6 Other adverse effects

**Product:** 

Endocrine disrupting poten-

tial

The substance/mixture does not contain components consid-

ered 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 chemi-

cal or used container.

Do not dispose of waste into sewer.

Where possible recycling is preferred to disposal or incinera-

If recycling is not practicable, dispose of in compliance with

local regulations.

Contaminated packaging Empty remaining contents.



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Triple rinse containers.

Empty containers should be taken to an approved waste han-

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

# **SECTION 14: Transport information**

14.1 UN number

 UNRTDG
 : UN 3077

 IMDG
 : UN 3077

 IATA
 : UN 3077

14.2 UN proper shipping name

**UNRTDG** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(CYPRODINIL, FLUDIOXONIL)

**IMDG** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(CYPRODINIL, FLUDIOXONIL)

**IATA** : Environmentally hazardous substance, solid, n.o.s.

(CYPRODINIL, FLUDIOXONIL)

14.3 Transport hazard class(es)

UNRTDG : 9
 IMDG : 9
 IATA : 9

14.4 Packing group

**UNRTDG** 

Packing group : III Labels : 9

**IMDG** 

Packing group : III
Labels : 9
EmS Code : F-A, S-F

IATA (Cargo)

Packing instruction (cargo : 956

aircraft)

Packing instruction (LQ) : Y956
Packing group : III

Labels : Miscellaneous

IATA (Passenger)

Packing instruction (passen- : 956

ger aircraft)

Packing instruction (LQ) : Y956
Packing group : III

Labels : Miscellaneous



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#### 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.

## **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.

H317 : May cause an allergic skin reaction. H318 : Causes serious eye damage.

H332 : Harmful if inhaled.

H335 : May cause respiratory irritation.

H400 : Very toxic to aquatic life.

H410 : Very 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

Eye Dam. : Serious eye damage Skin Sens. : Skin sensitisation

STOT SE : Specific target organ toxicity - single exposure

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Test-



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ing 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; 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:

| Skin Sens. 1      | H317 | Based on product data or assessment |
|-------------------|------|-------------------------------------|
| Aquatic Acute 1   | H400 | Based on product data or assessment |
| Aquatic Chronic 1 | H410 | Based on product data or assessment |

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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