

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version	Revision Date:	SDS Number:	Date of last issue: 25.10.2024
23.0	25.04.2025	S1269856	Date of first issue: 14.06.2017

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

#### 1.1 Product identifier

Trade name : SWITCH  
Design code : A9219B  
Product Registration Number : PCS No. 06414

Unique Formula Identifier (UFI) : [U998-7097-T000-JC8Y](#)

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

Use of the Substance/Mixture : Fungicide  
Recommended restrictions on use : professional use

#### 1.3 Details of the supplier of the safety data sheet

Company : Syngenta Ireland Limited  
Block 6 Cleaboy Business Park, Old Kilmeaden Road,  
Waterford  
Ireland  
Telephone : (051) 377203  
Telefax : -  
E-mail address of person responsible for the SDS : [cropsales.ie@syngenta.com](mailto:cropsales.ie@syngenta.com)

#### 1.4 Emergency telephone number

Emergency telephone number : Syngenta +44 1484 538444  
Poisons Information Centre of Ireland  
Members of Public: +353 (1) 809 2166. (8.00 a.m. to 10.00 p.m. 7 days a week)  
Healthcare Professionals: +353 (1) 809 2566 (24-hour service)

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878





## SWITCH

Version	Revision Date:	SDS Number:	Date of last issue: 25.10.2024
23.0	25.04.2025	S1269856	Date of first issue: 14.06.2017

Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, Category 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 : H317 May cause an allergic skin reaction.  
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : **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.

**Disposal:**  
P501 Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty triple rinsed clean containers which can be disposed of as non-hazardous waste.

#### Hazardous components which must be listed on the label:

cyprodinil (ISO)

#### Additional Labelling

EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

### 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.

Ecological information: 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.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version 23.0      Revision Date: 25.04.2025      SDS Number: S1269856      Date of last issue: 25.10.2024  
Date of first issue: 14.06.2017

Toxicological information: 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.

May form combustible dust concentrations in air.

### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

##### Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
cyprodinil (ISO)	121552-61-2 612-242-00-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)	131341-86-1 608-069-00-4	Aquatic Acute 1; H400 Aquatic Chronic 1; H410  M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 10	>= 25 - < 30
sodium dibutyl-naphthalenesulphonate	25417-20-3 246-960-6	Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335 (Respiratory system) Aquatic Chronic 3; H412	>= 1 - < 2.5

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

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version	Revision Date:	SDS Number:	Date of last issue: 25.10.2024
23.0	25.04.2025	S1269856	Date of first issue: 14.06.2017

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.
- Risks : May cause an allergic skin reaction.

### 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.

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

- Specific hazards during fire- : Fire will spread by burning with a visible flame.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version	Revision Date:	SDS Number:	Date of last issue: 25.10.2024
23.0	25.04.2025	S1269856	Date of first issue: 14.06.2017

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

Hazardous combustion products : Carbon oxides  
Nitrogen oxides (NOx)  
Fluorine compounds  
Sulphur oxides

### 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.  
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 disposal 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.

## 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.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version	Revision Date:	SDS Number:	Date of last issue: 25.10.2024
23.0	25.04.2025	S1269856	Date of first issue: 14.06.2017

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.

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 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 of exposure)	Control parameters	Basis
cyprodinil (ISO)	121552-61-2	TWA	5 mg/m <sup>3</sup>	Syngenta
fludioxonil (ISO)	131341-86-1	TWA	5 mg/m <sup>3</sup>	Syngenta
silica	61790-53-2	OELV - 8 hrs (TWA) (Respirable dust)	2.4 mg/m <sup>3</sup> (Silica)	IE OEL
		OELV - 8 hrs (TWA) (inhalable dust)	6 mg/m <sup>3</sup> (Silica)	IE OEL

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

Substance name	End Use	Exposure routes	Potential health effects	Value
sodium sulphate	Workers	Inhalation	Systemic effects	20 mg/m <sup>3</sup>
	Workers	Inhalation	Local effects	20 mg/m <sup>3</sup>
	Consumers	Inhalation	Systemic effects	12 mg/m <sup>3</sup>
	Consumers	Inhalation	Local effects	12 mg/m <sup>3</sup>
sodium dibutylnaphthalenesulphonate	Workers	Inhalation	Long-term systemic effects	0.549 mg/m <sup>3</sup>
	Workers	Inhalation	Long-term local ef-	0.36 mg/m <sup>3</sup>

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version 23.0      Revision Date: 25.04.2025      SDS Number: S1269856      Date of last issue: 25.10.2024  
Date of first issue: 14.06.2017

			ffects	
	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 effects	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 weight (d.w.)
	Marine sediment	4.02 mg/kg dry weight (d.w.)
	Soil	1.54 mg/kg dry weight (d.w.)
sodium dibutyl-naphthalenesulphonate	Fresh water	0.2 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

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version	Revision Date:	SDS Number:	Date of last issue: 25.10.2024
23.0	25.04.2025	S1269856	Date of first issue: 14.06.2017

- 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. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.
- 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:  
Dust impervious protective suit
- Respiratory protection : No personal respiratory protective equipment normally required.  
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 appropriate professional advice.

### Environmental exposure controls

- Water : Do not flush into surface water or sanitary sewer system.  
If the product contaminates rivers and lakes or drains inform respective authorities.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- Physical state : granules
- Colour : grey to brown
- Odour : weak
- Odour Threshold : No data available
- Melting point/freezing point : No data available
- Initial boiling point and boiling range : No data available

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version	Revision Date:	SDS Number:	Date of last issue: 25.10.2024
23.0	25.04.2025	S1269856	Date of first issue: 14.06.2017

Flammability : May form combustible dust concentrations in air.

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Minimum ignition temperature : 600 °C  
pH : 9.6  
Concentration: 1 %w/v

Viscosity  
Viscosity, kinematic : No data available

Solubility(ies)  
Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Vapour pressure : No data available

Density : 1 g/cm<sup>3</sup>

Bulk density : 0.537 g/cm<sup>3</sup>

Relative vapour density : No data available

Particle characteristics  
Particle size : No data available

### 9.2 Other information

Explosives : Not explosive

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

Flammable solids  
Burning number : 5 (20 °C)

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version	Revision Date:	SDS Number:	Date of last issue: 25.10.2024
23.0	25.04.2025	S1269856	Date of first issue: 14.06.2017

6 (100 °C)

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

Evaporation rate : No data available

Minimum ignition energy : 30 - 100 mJ

## 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

No hazardous decomposition products are known.

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

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): > 2.51 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Assessment: The substance or mixture has no acute inhala-

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version	Revision Date:	SDS Number:	Date of last issue: 25.10.2024
23.0	25.04.2025	S1269856	Date of first issue: 14.06.2017

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 inhalation 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  
Test atmosphere: dust/mist  
Assessment: The substance or mixture has no acute inhalation toxicity

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

#### **sodium dibutylnaphthalenesulphonate:**

Acute oral toxicity : Assessment: The component/mixture is moderately toxic after single ingestion.

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

### **Skin corrosion/irritation**

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

### **Product:**

Species : Rabbit  
Result : No skin irritation

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version	Revision Date:	SDS Number:	Date of last issue: 25.10.2024
23.0	25.04.2025	S1269856	Date of first issue: 14.06.2017

### Components:

#### **cyprodinil (ISO):**

Species : Rabbit  
Result : No skin irritation

#### **fludioxonil (ISO):**

Species : Rabbit  
Result : No skin irritation

#### **sodium dibutyl-naphthalenesulphonate:**

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:

#### **cyprodinil (ISO):**

Species : Rabbit  
Result : No eye irritation

#### **fludioxonil (ISO):**

Species : Rabbit  
Result : No eye irritation

#### **sodium dibutyl-naphthalenesulphonate:**

Result : Risk of serious damage to eyes.

#### **Respiratory or skin sensitisation**

##### **Skin sensitisation**

May cause an allergic skin reaction.

##### **Respiratory sensitisation**

Not classified due to lack of data.

### Product:

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

### Components:

#### **cyprodinil (ISO):**

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version	Revision Date:	SDS Number:	Date of last issue: 25.10.2024
23.0	25.04.2025	S1269856	Date of first issue: 14.06.2017

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

### fludioxonil (ISO):

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

### Germ cell mutagenicity

Not classified due to lack of data.

#### Components:

### cyprodinil (ISO):

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

### fludioxonil (ISO):

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

### Carcinogenicity

Not classified due to lack of data.

#### Components:

### cyprodinil (ISO):

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

### fludioxonil (ISO):

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

### Reproductive toxicity

Not classified due to lack of data.

#### Components:

### cyprodinil (ISO):

Reproductive toxicity - Assessment : No toxicity to reproduction

### fludioxonil (ISO):

Reproductive toxicity - Assessment : No toxicity to reproduction

### STOT - single exposure

Not classified due to lack of data.

#### Components:

### sodium dibutylnaphthalenesulphonate:

Target Organs : Respiratory system  
Assessment : The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version	Revision Date:	SDS Number:	Date of last issue: 25.10.2024
23.0	25.04.2025	S1269856	Date of first issue: 14.06.2017

irritation.

### STOT - repeated exposure

Not classified due to lack of data.

### Components:

#### **cyprodinil (ISO):**

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

#### **fludioxonil (ISO):**

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

### Aspiration toxicity

Not classified due to lack of data.

## 11.2 Information on other hazards

### Endocrine disrupting properties

#### Product:

Assessment : 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 12: Ecological information

### 12.1 Toxicity

#### Product:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 3.1 mg/l  
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 toxicity) : NOEC: 0.32 mg/l  
Exposure time: 21 d  
Species: Oncorhynchus mykiss (rainbow trout)

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version	Revision Date:	SDS Number:	Date of last issue: 25.10.2024
23.0	25.04.2025	S1269856	Date of first issue: 14.06.2017

Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.01 mg/l  
Exposure time: 22 d  
Species: Daphnia magna (Water flea)

### 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/l  
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 toxicity) : 10

Toxicity to microorganisms : EC50 (activated sludge): > 100 mg/l  
Exposure time: 3 h

Toxicity to fish (Chronic toxicity) : NOEC: 0.0406 mg/l  
Exposure time: 34 d  
Species: Cyprinodon variegatus (sheepshead minnow)

Toxicity to daphnia and other aquatic invertebrates (Chronic 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

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version	Revision Date:	SDS Number:	Date of last issue: 25.10.2024
23.0	25.04.2025	S1269856	Date of first issue: 14.06.2017

### 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
- 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 toxicity) : 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 toxicity) : 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 (Chronic 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

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version	Revision Date:	SDS Number:	Date of last issue: 25.10.2024
23.0	25.04.2025	S1269856	Date of first issue: 14.06.2017

M-Factor (Chronic aquatic toxicity) : 10  
M-Factor=1 used for transport classification

### sodium dibutylphthalenesulphonate:

#### Ecotoxicology Assessment

Acute aquatic toxicity : Harmful to aquatic life.  
Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

### 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.

### 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 environmental compartments : Remarks: Slightly mobile in soils  
Stability in soil : Dissipation time: 49 d  
Percentage dissipation: 50 % (DT50)  
Remarks: Product is not persistent.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version	Revision Date:	SDS Number:	Date of last issue: 25.10.2024
23.0	25.04.2025	S1269856	Date of first issue: 14.06.2017

### fludioxonil (ISO):

Distribution among environmental compartments : Remarks: immobile  
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 : Substance is not persistent, bioaccumulative, and toxic (PBT).. Substance is not very persistent and very bioaccumulative (vPvB).

#### fludioxonil (ISO):

Assessment : Substance is not persistent, bioaccumulative, and toxic (PBT).. Substance is not very persistent and very bioaccumulative (vPvB).

## 12.6 Endocrine disrupting properties

### Product:

Assessment : 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.

## 12.7 Other adverse effects

No data available

## 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.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version	Revision Date:	SDS Number:	Date of last issue: 25.10.2024
23.0	25.04.2025	S1269856	Date of first issue: 14.06.2017

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.

Waste Code : uncleaned packagings  
15 01 10, packaging containing residues of or contaminated by hazardous substances

### SECTION 14: Transport information

#### 14.1 UN number or ID number

ADR : UN 3077  
RID : UN 3077  
IMDG : UN 3077  
IATA : UN 3077

#### 14.2 UN proper shipping name

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(CYPRODINIL, FLUDIOXONIL)

RID : 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)

	Class	Subsidiary risks
ADR	: 9	
RID	: 9	
IMDG	: 9	
IATA	: 9	

#### 14.4 Packing group

ADR  
Packing group : III  
Classification Code : M7  
Hazard Identification Number : 90  
Labels : 9  
Tunnel restriction code : (-)

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version	Revision Date:	SDS Number:	Date of last issue: 25.10.2024
23.0	25.04.2025	S1269856	Date of first issue: 14.06.2017

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.

### RID

Packing group : III  
Classification Code : M7  
Hazard Identification Number : 90  
Labels : 9  
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

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

### IATA (Cargo)

Packing instruction (cargo aircraft) : 956  
Packing instruction (LQ) : Y956  
Packing group : III  
Labels : Miscellaneous  
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.

### IATA (Passenger)

Packing instruction (passenger aircraft) : 956  
Packing instruction (LQ) : Y956  
Packing group : III  
Labels : Miscellaneous  
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.

## 14.5 Environmental hazards

### ADR

Environmentally hazardous : yes

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version	Revision Date:	SDS Number:	Date of last issue: 25.10.2024
23.0	25.04.2025	S1269856	Date of first issue: 14.06.2017

### RID

Environmentally hazardous : yes

### 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 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

## SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Conditions of restriction for the following entries should be considered:  
Number on list 72: formaldehyde  
  
Number on list 75: If you intend to use this product as tattoo ink, please contact your vendor.

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : Number on list 77: formaldehyde  
Regulation (EC) on substances that deplete the ozone layer : Not applicable  
Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable  
Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable  
REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. E1 ENVIRONMENTAL HAZARDS

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version	Revision Date:	SDS Number:	Date of last issue: 25.10.2024
23.0	25.04.2025	S1269856	Date of first issue: 14.06.2017

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)  
Not applicable

### Other regulations:

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.  
Use plant protection products safely. Always read the label and product information before use.  
Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

### 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.  
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.  
H412 : Harmful 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 Irrit. : Skin irritation  
Skin Sens. : Skin sensitisation  
STOT SE : Specific target organ toxicity - single exposure  
IE OEL : Ireland. List of Chemical Agents and Carcinogens with Occupational Exposure Limit Values - Code of Practice, Schedule 1 and 2  
  
Syngenta : Syngenta Occupational Exposure Limit  
IE OEL / OELV - 8 hrs (TWA) : Occupational exposure limit value (8-hour reference period)  
Syngenta / TWA : Time weighted average

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 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 - Emergen-

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## SWITCH

Version	Revision Date:	SDS Number:	Date of last issue: 25.10.2024
23.0	25.04.2025	S1269856	Date of first issue: 14.06.2017

cy 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; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

### Further information

#### Classification of the mixture:

Skin Sens. 1	H317
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

#### Classification procedure:

Based on product data or assessment
Based on product data or assessment
Based on product data or assessment

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

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