

# SAFETY DATA SHEET



## TREMISIA™ fungicide

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

#### 1.1 Product identifier

**Product name** TREMISIA™ fungicide

**Other means of identification**

**Product code** 50002363

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

Use of the Sub- : Fungicide  
stance/Mixture

Recommended restrictions : Use as recommended by the label.  
on use

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

**Supplier Address** FMC Ukraine LLC  
8 Illinska Street  
04070 Kyiv  
Ukraine

Telephone: +380443648258, Website: fmc.com.ua  
E-mail address: SDS-Info@fmc.com, info@fmc.com.ua .

#### 1.4 Emergency telephone number

For leak, fire, spill or accident emergencies, call:  
Ukraine: 380-947101374 (CHEMTREC)

Medical emergency:  
All other countries: +1 651 / 632-6793 (Collect)

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### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

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

Acute toxicity, Category 4 H302: Harmful if swallowed.

Acute toxicity, Category 4 H332: Harmful if inhaled.

Short-term (acute) aquatic hazard, Category 1 H400: Very toxic to aquatic life.

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Long-term (chronic) aquatic hazard, Category 2

H411: 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 : H302 + H332 Harmful if swallowed or if inhaled.  
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements :

#### Prevention:

P261 Avoid breathing mist or vapours.  
P264 Wash skin thoroughly after handling.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

#### Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.  
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.

#### Disposal:

P501 Dispose of contents/container as hazardous waste in accordance with local regulations.

Hazardous components which must be listed on the label:

Flutriafol

#### Additional Labelling

EUH208 Contains 1,2-benzisothiazol-3(2H)-one, Fluindapyr. May produce an allergic reaction.

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.

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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)
Fluindapyr	1383809-87-7	Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	20,9
Flutriafol	76674-21-0	Acute Tox. 4; H302 Aquatic Chronic 2; H411	20,9
propane-1,2-diol	57-55-6 200-338-0		$\geq 1 - < 10$
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, phosphate, potassium salt	68186-36-7	Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 3; H412	$\geq 1 - < 2,5$
Sodium alkyl naphthalenesulfonate formaldehyde condensate	68425-94-5	Eye Irrit. 2; H319 Aquatic Chronic 3; H412	$\geq 1 - < 2,5$
1,2-benzisothiazol-3(2H)-one	2634-33-5 220-120-9 613-088-00-6	Acute Tox. 2; H330 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	$\geq 0,0025 - < 0,025$

For explanation of abbreviations see section 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

- General advice : Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.
- Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing  
Avoid inhalation, ingestion and contact with skin and eyes.  
If potential for exposure exists refer to Section 8 for specific

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personal protective equipment.

- If inhaled : Remove to fresh air.  
If unconscious, place in recovery position and seek medical advice.  
If experiencing any discomfort, immediately remove from exposure. Light cases: Keep person under surveillance. Get medical attention immediately if symptoms develop. Serious cases: Get medical attention immediately or call for an ambulance.
- In case of skin contact : If on clothes, remove clothes.  
If on skin, rinse well with water.  
Wash off with soap and plenty of water.  
Get medical attention immediately if irritation develops and persists.
- In case of eye contact : Flush eyes with water as a precaution.  
Remove contact lenses.  
Protect unharmed eye.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
Do not induce vomiting without medical advice.  
Let the exposed person rinse mouth and let him/her drink several glasses of water, but do not induce vomiting. If vomiting does occur, let him/her rinse mouth and drink fluids again.  
Get medical attention immediately.

### 4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : Contains a triazole. Symptoms may include nausea, vomiting, diarrhea, visual changes, hallucinations, rash, itching, and alopecia.

- Risks : Harmful if swallowed or if inhaled.

### 4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : Treat symptomatically.  
Immediate medical attention is required in case of ingestion.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media : Dry chemical, CO<sub>2</sub>, water spray or regular foam.  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing : High volume water jet

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media Do not spread spilled material with high-pressure water streams.

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

Specific hazards during fire-fighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Fire may produce irritating, corrosive and/or toxic gases.  
Carbon oxides  
Sulphur oxides  
Nitrogen oxides (NOx)  
Fluorine compounds  
Hydrogen cyanide  
Hydrogen fluoride  
Fluorinated compounds

**5.3 Advice for firefighters**

Special protective equipment for firefighters : Firefighters should wear protective clothing and self-contained breathing apparatus.

Specific extinguishing methods : Remove undamaged containers from fire area if it is safe to do so.  
Use a water spray to cool fully closed containers.

Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions : Evacuate personnel to safe areas.  
Use personal protective equipment.  
If it can be safely done, stop the leak.  
Do not touch or walk through the spilled material.  
Never return spills in original containers for re-use.  
Mark the contaminated area with signs and prevent access to unauthorized personnel.  
Only qualified personnel equipped with suitable protective equipment may intervene.

**6.2 Environmental precautions**

Environmental precautions : Prevent further leakage or spillage if safe to do so.  
Prevent product from entering drains.  
If the product contaminates rivers and lakes or drains inform respective authorities.

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**6.3 Methods and material for containment and cleaning up**

Methods for cleaning up : Never return spills in original containers for re-use.  
Collect as much of the spill as possible with a suitable absorbent material.  
Pick up and transfer to properly labelled containers.  
Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**

See sections: 7, 8, 11, 12 and 13.

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**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Advice on safe handling : Do not breathe vapours/dust.  
For personal protection see section 8.  
Avoid formation of respirable particles.  
Dispose of rinse water in accordance with local and national regulations.  
Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : Avoid contact with skin, eyes and clothing. Do not inhale aerosol. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

**7.2 Conditions for safe storage, including any incompatibilities**

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully re-sealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards.

Further information on storage conditions : Store in closed, labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. A warning sign reading "POISON" is recommended. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A hand wash station should be available.

Further information on storage stability : No decomposition if stored and applied as directed.

**7.3 Specific end use(s)**

Specific use(s) : Registered pesticide to be used in accordance with a label approved by country-specific regulatory authorities.

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### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

##### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
propane-1,2-diol	57-55-6	MAC (aerosol and vapour)	7 mg/m <sup>3</sup>	UA OEL
Further information: Danger class 3				

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

Substance name	End Use	Exposure routes	Potential health effects	Value
1,2-benzisothiazol-3(2H)-one	Workers	Inhalation	Long-term systemic effects	6,81 mg/m <sup>3</sup>
	Workers	Dermal	Long-term systemic effects	0,966 mg/kg
	Consumers	Inhalation	Long-term systemic effects	1,2 mg/m <sup>3</sup>
	Consumers	Dermal	Long-term systemic effects	0,345 mg/kg

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

Substance name	Environmental Compartment	Value
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/l
	Marine sediment	0,00499 mg/l

#### 8.2 Exposure controls

##### Personal protective equipment

- Eye/face protection : Eye wash bottle with pure water  
Tightly fitting safety goggles
- Hand protection  
Material : Wear chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber.
- Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Skin and body protection : Impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Respiratory protection : In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

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Protective measures : Plan first aid action before beginning work with this product.  
Always have on hand a first-aid kit, together with proper instructions.  
Wear suitable protective equipment.  
When using do not eat, drink or smoke.

In the context of professional plant protection use as recommended, the end user must refer to the label and the instructions for use.

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Physical state	:	suspension
Colour	:	light brown
Odour	:	Faint odour
Odour Threshold	:	No data available
pH	:	6,42 (22,1 °C) (1% solution in water)
Melting point/ range	:	not determined
Boiling point/boiling range	:	not determined
Flash point	:	> 100 °C
Evaporation rate	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	Not available for this mixture.
Relative vapour density	:	No data available
Relative density	:	
Density	:	1,1470 g/cm <sup>3</sup> (22,7 °C)
Bulk density	:	No data available
Solubility(ies)	:	
Water solubility	:	dispersible
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity	:	
Viscosity, dynamic	:	365,0 mPa,s (21,5 °C) 295,8 mPa,s (41,5 °C)
Viscosity, kinematic	:	365 mm <sup>2</sup> /s (21,5 °C) 295,8 mm <sup>2</sup> /s (41,5 °C)



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

### 9.2 Other information

Molecular weight : Not applicable  
Particle size : Not applicable  
Particle Size Distribution : Not applicable  
Self-ignition : No data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No decomposition if stored and applied as directed.

### 10.2 Chemical stability

No decomposition if stored and applied as directed.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if stored and applied as directed.

### 10.4 Conditions to avoid

Conditions to avoid : Avoid extreme temperatures  
Avoid formation of aerosol.  
Protect from frost, heat and sunlight.  
Heating of the mixture may evolve harmful and irritant vapours.

### 10.5 Incompatible materials

Materials to avoid : Avoid strong acids, bases, and oxidizers

### 10.6 Hazardous decomposition products

Stable under recommended storage conditions.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Harmful if swallowed or if inhaled.

#### Product:

Acute oral toxicity : LD50 (Rat, female): 550 mg/kg  
Method: OECD Test Guideline 425

Acute inhalation toxicity : LC50 (Rat, male and female): > 2,12 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist

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Method: OECD Test Guideline 403  
Symptoms: hypoactivity, Breathing difficulties  
Remarks: no mortality

Acute dermal toxicity : LD50 (Rat, male and female): > 5.000 mg/kg  
Method: OECD Test Guideline 402  
Symptoms: Irritation  
Assessment: The substance or mixture has no acute dermal toxicity  
Remarks: no mortality

### Components:

#### **Fluindapyr:**

Acute oral toxicity : LD50 (Rat, female): > 2.000 mg/kg  
Method: OECD Test Guideline 423  
GLP: yes  
Assessment: The component/mixture is minimally toxic after single ingestion.  
Remarks: no mortality

Acute inhalation toxicity : LC50 (Rat, male and female): > 5,19 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
Symptoms: ataxia, Breathing difficulties  
GLP: yes  
Remarks: no mortality

Acute dermal toxicity : LD50 (Rat, male and female): > 2.000 mg/kg  
Method: OECD Test Guideline 402  
Symptoms: Irritation  
GLP: yes  
Assessment: The component/mixture is minimally toxic after single contact with skin.  
Remarks: no mortality

#### **Flutriafol:**

Acute oral toxicity : LD50 (Rat, female): 300 - 2.000 mg/kg  
Method: OECD Test Guideline 423  
Target Organs: Liver, Gastrointestinal tract  
Symptoms: Fatality  
GLP: yes  
Assessment: The component/mixture is moderately toxic after single ingestion.

LD50 (Rat, female): 1.030 mg/kg  
Method: OECD Test Guideline 425  
Target Organs: Liver, Gastrointestinal tract  
Symptoms: Breathing difficulties

Acute inhalation toxicity : LC50 (Rat): > 5,2 mg/l  
Exposure time: 4 h

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Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
Symptoms: Fatality, ataxia, Breathing difficulties  
GLP: yes

Acute dermal toxicity : LD50 (Rat, male and female): > 2.000 mg/kg  
Method: OECD Test Guideline 402  
GLP: yes  
Remarks: no mortality

LD50 (Rat, male and female): > 5.000 mg/kg  
Method: OECD Test Guideline 402  
Symptoms: Irritation  
GLP: yes  
Assessment: The substance or mixture has no acute dermal toxicity  
Remarks: no mortality

### propane-1,2-diol:

Acute oral toxicity : LD50 (Rat, male and female): 22.000 mg/kg

Acute inhalation toxicity : LC0 (Rabbit): 31,7 mg/l  
Exposure time: 2 h  
Test atmosphere: vapour  
Remarks: no mortality

Acute dermal toxicity : LD50 (Rabbit): > 2.000 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity

### Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, phosphate, potassium salt:

Acute oral toxicity : Assessment: Toxic effects cannot be excluded

### Sodium alkyl naphthalenesulfonate formaldehyde condensate:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

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

Acute oral toxicity : LD50 (Rat, male and female): 490 mg/kg  
Method: OECD Test Guideline 401

Acute toxicity estimate: 450 mg/kg  
Method: Acute toxicity estimate according to Regulation (EC) No. 1272/2008  
Remarks: Based on EU Harmonised classification - Annex VI of Regulation (EC) No 1272/2008 (CLP Regulation)

Acute inhalation toxicity : Acute toxicity estimate: 0,21 mg/l  
Test atmosphere: dust/mist  
Method: Acute toxicity estimate according to Regulation (EC) No. 1272/2008  
Remarks: Based on EU Harmonised classification - Annex VI

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of Regulation (EC) No 1272/2008 (CLP Regulation)

Acute dermal toxicity : LD50 (Rat, male and female): > 2.000 mg/kg  
Method: OECD Test Guideline 402  
Assessment: The substance or mixture has no acute dermal toxicity

### Skin corrosion/irritation

Not classified based on available information.

#### Product:

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : No skin irritation  
Remarks : Minimal effects that do not meet the threshold for classification.

#### Components:

##### **Fluindapyr:**

Species : Rabbit  
Assessment : Not classified as irritant  
Method : OECD Test Guideline 404  
GLP : yes  
  
Assessment : Not classified as irritant  
Method : EPISKIN Human Skin Model Test

##### **Flutriafol:**

Species : Rabbit  
Assessment : Not classified as irritant  
Method : OECD Test Guideline 404  
Result : No skin irritation  
GLP : yes  
  
Species : Rabbit  
Result : No skin irritation

##### **propane-1,2-diol:**

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : No skin irritation

##### **Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, phosphate, potassium salt:**

Result : Skin irritation

##### **Sodium alkyl naphthalenesulfonate formaldehyde condensate:**

Remarks : No data available

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

Species	: Rabbit
Exposure time	: 72 h
Method	: OECD Test Guideline 404
Result	: No skin irritation

**Serious eye damage/eye irritation**

Not classified based on available information.

**Product:**

Species	: Rabbit
Method	: OECD Test Guideline 405
Result	: No eye irritation

**Components:****Fluindapyr:**

Species	: Rabbit
Method	: OECD Test Guideline 405
Result	: No eye irritation
GLP	: yes
Method	: Bovine cornea (BCOP)
Result	: not corrosive
GLP	: yes

**Flutriafol:**

Species	: Rabbit
Assessment	: Not classified as irritant
Method	: OECD Test Guideline 405
Result	: slight irritation
GLP	: yes

Species	: Rabbit
Assessment	: Not classified as irritant
Method	: OECD Test Guideline 405
Result	: Slight or no eye irritation
GLP	: yes

Species	: Rabbit
Result	: slight irritation

**propane-1,2-diol:**

Species	: Rabbit
Method	: OECD Test Guideline 405
Result	: No eye irritation

**Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, phosphate, potassium salt:**

Result	: Irreversible effects on the eye
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### **Sodium alkyl naphthalenesulfonate formaldehyde condensate:**

Result : Eye irritation

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

Species : Bovine cornea  
Method : OECD Test Guideline 437  
Result : No eye irritation

Species : Rabbit  
Method : EPA OPP 81-4  
Result : Irreversible effects on the eye

### **Respiratory or skin sensitisation**

#### **Skin sensitisation**

Not classified based on available information.

#### **Respiratory sensitisation**

Not classified based on available information.

#### **Product:**

Test Type : Local lymph node assay (LLNA)  
Exposure routes : Skin contact  
Species : Mouse  
Method : OECD Test Guideline 429  
Result : Did not cause sensitisation on laboratory animals.

#### **Components:**

##### **Fluindapyr:**

Test Type : Local lymph node assay (LLNA)  
Exposure routes : Skin contact  
Method : OECD Test Guideline 429  
Result : May cause sensitisation by skin contact.  
GLP : yes

##### **Flutriafol:**

Test Type : Buehler Test  
Exposure routes : Skin contact  
Species : Guinea pig  
Assessment : Did not cause sensitisation on laboratory animals.  
Method : OECD Test Guideline 406  
GLP : yes

Species : Guinea pig  
Result : Not a skin sensitizer.

##### **propane-1,2-diol:**

Test Type : Maximisation Test

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Species : Guinea pig  
Result : negative

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

Test Type : Maximisation Test  
Species : Guinea pig  
Method : OECD Test Guideline 406  
Result : May cause sensitisation by skin contact.

Species : Guinea pig  
Method : FIFRA 81.06  
Result : May cause sensitisation by skin contact.

### Germ cell mutagenicity

Not classified based on available information.

### Components:

#### Fluindapyr:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro  
Test system: lymphocytes  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 473  
Result: negative

Test Type: gene mutation test  
Test system: mouse lymphoma cells  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 490  
Result: negative

Test Type: Ames test  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 471  
Result: negative

Test Type: In vitro mammalian cell gene mutation test  
Test system: mouse lymphoma cells  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 476  
Result: negative  
GLP: yes

Genotoxicity in vivo : Test Type: Mammalian bone marrow sister chromatid exchange  
Species: Mouse  
Result: negative

Test Type: Micronucleus test  
Species: Mouse  
Method: OECD Test Guideline 474  
Result: negative

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### Flutriafol:

Genotoxicity in vivo : Test Type: dominant lethal test  
Method: OECD Test Guideline 478  
Result: negative

### propane-1,2-diol:

Genotoxicity in vitro : Test Type: reverse mutation assay  
Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test  
Species: Mouse  
Result: negative

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

Genotoxicity in vitro : Test Type: gene mutation test  
Test system: mouse lymphoma cells  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 476  
Result: negative

Test Type: Ames test  
Method: OECD Test Guideline 471  
Result: negative

Test Type: Chromosome aberration test in vitro  
Method: OECD Test Guideline 473  
Result: positive

Genotoxicity in vivo : Test Type: unscheduled DNA synthesis assay  
Species: Rat (male)  
Cell type: Liver cells  
Application Route: Ingestion  
Exposure time: 4 h  
Method: OECD Test Guideline 486  
Result: negative

Test Type: Micronucleus test  
Species: Mouse  
Application Route: Oral  
Method: OECD Test Guideline 474  
Result: negative

Germ cell mutagenicity- Assessment : Weight of evidence does not support classification as a germ cell mutagen.

### Carcinogenicity

Not classified based on available information.

### Components:

#### Fluindapyr:

Species : Mouse



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Application Route : Oral  
Exposure time : 18 month(s)  
Method : OECD Test Guideline 451  
Result : Not a carcinogenic hazard

Species : Rat  
Application Route : Oral  
Exposure time : 2 Years  
Method : OECD Test Guideline 453  
Result : Not a carcinogenic hazard  
GLP : yes

### **Flutriafol:**

Species : Mouse  
Exposure time : 2 Years  
NOAEL : 1,2 mg/kg bw/day  
Result : negative

Species : Rat  
Exposure time : 2 Years  
NOAEL : 1 mg/kg bw/day  
Result : negative

Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

### **propane-1,2-diol:**

Species : Rat  
Application Route : Oral  
Exposure time : 2 Years  
Result : negative

### **Reproductive toxicity**

Not classified based on available information.

### **Components:**

#### **Fluindapyr:**

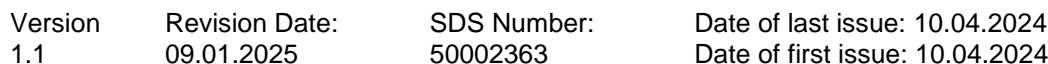
Effects on fertility : Test Type: Two-generation study  
General Toxicity - Parent: NOEL: ca. 100 ppm  
Fertility: NOAEL: ca. 400 ppm  
Early Embryonic Development: NOAEL: ca. 400 ppm  
Method: OECD Test Guideline 416  
GLP: yes

#### **Flutriafol:**

Effects on fertility : Test Type: reproductive and developmental toxicity study  
Method: OECD Test Guideline 416  
Result: negative

Effects on foetal develop- : Test Type: Embryo-foetal development

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Method: OECD Test Guideline 414  
Result: negative

Effects on fertility	:	Test Type: reproductive and developmental toxicity study
		Species: Mouse
		Application Route: Oral
		Result: negative

Effects on foetal development	: Test Type: Embryo-foetal development Species: Mouse Application Route: Oral Method: OECD Test Guideline 414 Result: Animal testing did not show any effects on fertility. Remarks: Based on data from similar materials
-------------------------------	--

Effects on fertility	: Species: Rat, male Application Route: Ingestion General Toxicity - Parent: NOAEL: 18,5 mg/kg body weight General Toxicity F1: NOAEL: 48 mg/kg body weight Fertility: NOAEL: 112 mg/kg bw/day Symptoms: No effects on reproduction parameters Method: OPPTS 870.3800 Result: negative
----------------------	---

Reproductive toxicity - Assessment	:	Weight of evidence does not support classification for reproductive toxicity
------------------------------------	---	--

Not classified based on available information.

### Flutriafol:

Assessment : May cause respiratory irritation.

Not classified based on available information.

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

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

### Components:

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Species	: Rat
NOAEL	: 1.000 mg/kg
Application Route	: Dermal
Exposure time	: 21 d
Number of exposures	: 5 d/w for 6 hr
Dose	: 0,100,300,1000 mg/kg bw/d
Method	: OECD Test Guideline 410
GLP	: yes
Symptoms	: Skin irritation

### Flutriafol:

Species	: Rat
NOAEL	: 13.3 mg/kg bw/day
Application Route	: Oral - feed
Exposure time	: 90 d
Symptoms	: anemia, Liver effects

Species	: Dog
NOAEL	: 5 mg/kg bw/day
Application Route	: Oral
Exposure time	: 90 d
Symptoms	: blood effects, Liver effects

### propane-1,2-diol:

Species	: Rat, male and female
NOAEL	: 1.700 mg/kg
Application Route	: Oral
Exposure time	: 2 Years

Species	: Rat, male and female
NOAEL	: 1.000 mg/kg
LOAEL	: 160 mg/kg
Application Route	: Inhalation
Exposure time	: 90 Days

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

Species	: Rat, male and female
NOAEL	: 15 mg/kg
Application Route	: Ingestion
Exposure time	: 28 d
Method	: OECD Test Guideline 407
Symptoms	: Irritation

Species	: Rat, male and female
NOAEL	: 69 mg/kg
Application Route	: Ingestion
Exposure time	: 90 d
Symptoms	: Irritation, Reduced body weight

### Aspiration toxicity

Not classified based on available information.

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### Components:

#### **Flutriafol:**

The substance does not have properties associated with aspiration hazard potential.

#### **Neurological effects**

### Components:

#### **Fluindapyr:**

Remarks : <\*\* Phrase language not available: [ 6N ] CUST - FMC\_00000000094 \*\*>

#### **Flutriafol:**

No neurotoxicity observed in animal studies

#### **Further information**

### Product:

Remarks : No data available

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Product:

Toxicity to fish	: LC50 (Cyprinus carpio (Carp)): 0,91 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 3,8 mg/l Exposure time: 48 h Method: OECD Test Guideline 202  NOEC (Daphnia magna (Water flea)): 2,5 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	: EyC50 (Raphidocelis subcapitata (freshwater green alga)): 9,6 mg/l Exposure time: 72 h Method: OECD Test Guideline 201  ErC50 (Raphidocelis subcapitata (freshwater green alga)): > 9,9 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to soil dwelling organisms	: LC50: > 1.000 mg/kg Exposure time: 14 d Species: Eisenia fetida (earthworms)

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Method: OECD Test Guideline 207

Method: OECD Test Guideline 216

Remarks: No significant adverse effect on nitrogen mineralization.

Method: OECD Test Guideline 217

Remarks: No significant adverse effect on carbon mineralization.

Toxicity to terrestrial organisms : LD50: 946 mg/kg  
Exposure time: 14 d  
End point: Acute oral toxicity  
Species: *Colinus virginianus* (Bobwhite quail)  
Method: OECD Test Guideline 223

LD50: 240 µg/bee  
Exposure time: 48 h  
End point: Acute contact toxicity  
Species: *Apis mellifera* (bees)  
Method: OECD Test Guideline 214

LD50: 24 µg/bee  
Exposure time: 48 h  
End point: Acute oral toxicity  
Species: *Apis mellifera* (bees)  
Method: OECD Test Guideline 213  
Remarks: Active ingredient

### Components:

#### **Fluindapyr:**

Toxicity to fish : LC50 (*Oncorhynchus mykiss* (rainbow trout)): 0,121 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 203  
GLP: yes

LC50 (*Oryzias latipes* (Japanese medaka)): > 1,8 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 203  
GLP: yes

LC50 (*Danio rerio* (zebra fish)): 0,424 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 203  
GLP: yes

LC50 (*Cyprinodon variegatus* (sheepshead minnow)): 0,43 mg/l  
Exposure time: 96 h

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Test Type: static test  
Method: OPPTS 850.1075  
GLP: yes

LC50 (Cyprinus carpio (Carp)): 0,11 mg/l  
Exposure time: 96 h  
Test Type: Static renewal test  
Method: OECD Test Guideline 203  
GLP: yes

LC50 (Lepomis macrochirus (Bluegill sunfish)): 0,286 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 203  
GLP: yes

LC50 (Pimephales promelas (fathead minnow)): 0,19 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203  
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0,141 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202

LC50 (Americamysis bahia (mysid shrimp)): 0,33 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OCSPP 850.1035  
GLP: yes

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 4,83 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201  
GLP: yes

NOEC (Lemna gibba (duckweed)): 2 mg/l  
Exposure time: 7 d  
Method: OECD Test Guideline 221  
GLP: yes

EC50 (Skeletonema costatum (Diatom)): > 2 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201  
GLP: yes

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : NOEC: 0,031 mg/l  
Exposure time: 32 d  
Species: Pimephales promelas (fathead minnow)

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		Test Type: Early-life Stage Method: OECD Test Guideline 210 GLP: yes
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0,062 mg/l Exposure time: 28 d Species: Americamysis bahia (mysid shrimp) Test Type: flow-through test Method: OPPTS 850.1350 GLP: yes  NOEC: 0,12 mg/l End point: reproduction Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211 GLP: yes  NOEC: 68 mg/l Exposure time: 42 d Species: Hyalella azteca (Amphipod) Test Type: Static renewal test GLP: yes
M-Factor (Chronic aquatic toxicity)	:	1
Toxicity to soil dwelling organisms	:	LC50: > 1.000 mg/kg Species: Eisenia fetida (earthworms)  Method: OECD Test Guideline 216 Remarks: No significant adverse effect on nitrogen mineralization.  Method: OECD Test Guideline 217 Remarks: No significant adverse effect on carbon mineralization.
Toxicity to terrestrial organisms	:	LD50: 1.612 mg/kg Species: Colinus virginianus (Bobwhite quail) Method: OECD Test Guideline 205 GLP:yes  LD50: 2.250 mg/kg Species: Colinus virginianus (Bobwhite quail) Method: OPPTS 850.2100 GLP:yes  LD50: > 300 µg/bee Exposure time: 48 h Species: Apis mellifera (bees) Method: OECD Test Guideline 214

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GLP:yes  
Remarks: Contact

LD50: > 32,8 µg/bee  
Exposure time: 48 h  
Species: Apis mellifera (bees)  
Method: OECD Test Guideline 213  
GLP:yes  
Remarks: Oral

NOEC: 679 mg/kg  
End point: Reproduction Test  
Species: Anas platyrhynchos (Mallard duck)  
Method: OECD Test Guideline 206  
GLP:yes

NOEC: 174 mg/kg  
End point: Reproduction Test  
Species: Colinus virginianus (Bobwhite quail)  
Method: OECD Test Guideline 206  
GLP:yes

### Flutriafol:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 33 mg/l  
Exposure time: 96 h

LC50 (Danio rerio (zebra fish)): 22,97 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 67 mg/l  
End point: Immobilization  
Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202  
GLP: yes

EC50 (Daphnia magna (Water flea)): 42,21 mg/l  
End point: Immobilization  
Exposure time: 48 h  
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : IC50 (Selenastrum capricornutum (green algae)): 12 mg/l  
Exposure time: 96 h

IC50 (Scenedesmus subspicatus): 1,9 mg/l  
Exposure time: 72 h

EbC50 (Lemna gibba (duckweed)): 0,65 mg/l  
Exposure time: 7 d

EyC50 (Pseudokirchneriella subcapitata (algae)): 3,69 mg/l  
Exposure time: 72 h



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Method: OECD Test Guideline 201  
GLP: yes

Toxicity to fish (Chronic toxicity) : NOEC: 4,8 mg/l  
Exposure time: 28 d  
Species: Lepomis macrochirus (Bluegill sunfish)

NOEC: 20 mg/l  
Exposure time: 14 d  
Species: Danio rerio (zebra fish)  
Method: OECD Test Guideline 204

NOEC: 0,1 mg/l  
End point: Growth  
Species: Pimephales promelas (fathead minnow)  
Test Type: Early Life-Stage  
Method: OECD Test Guideline 210

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0,31 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)

NOEC: 0,45 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Method: OECD Test Guideline 211

Toxicity to soil dwelling organisms : NOEC:  
0.01 mg/cm<sup>2</sup>  
Exposure time: 180 d  
Species: Eisenia fetida (earthworms)

LC50: > 1.000 mg/kg  
Exposure time: 14 d  
Species: Eisenia fetida (earthworms)  
Method: OECD Test Guideline 207

Toxicity to terrestrial organisms : LD50: > 144 µg/bee  
End point: Acute oral toxicity  
Species: Apis mellifera (bees)  
Method: OECD Test Guideline 213  
GLP:yes

LD50: > 150 µg/bee  
End point: Acute contact toxicity  
Species: Apis mellifera (bees)  
Method: OECD Test Guideline 214  
GLP:yes

LD50: > 100 µg/bee  
End point: Acute contact toxicity  
Species: Apis mellifera (bees)  
Method: OECD Test Guideline 214

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LD50: 872,53 µg/bee  
Exposure time: 48 h  
End point: Acute oral toxicity  
Species: Apis mellifera (bees)  
Method: OECD Test Guideline 213

LD50: > 5.000 mg/kg  
Species: Anas platyrhynchos (Mallard duck)

LD50: ca. 385 mg/kg  
Species: Coturnix japonica (Japanese quail)  
Method: US EPA Test Guideline OPPTS 850.2100

LD50: 4260 ppm  
Species: Coturnix japonica (Japanese quail)  
Method: OPPTS 850.2200

### propane-1,2-diol:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 40.613 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	(Mysidopsis bahia (opossum shrimp)): 18.800 mg/l Exposure time: 96 h
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 34.100 mg/l Exposure time: 48 h Method: OECD Test Guideline 201
Toxicity to microorganisms	:	EC50 (Pseudomonas putida): > 20.000 mg/l Exposure time: 18 h
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 13.020 mg/l Exposure time: 7 d

### Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, phosphate, potassium salt:

#### Ecotoxicology Assessment

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

### Sodium alkyl naphthalenesulfonate formaldehyde condensate:

Toxicity to fish	:	LC50 (Zebra fish): > 10 - 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Method: OECD Test Guideline 202

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Remarks: Based on data from similar materials

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201  
Remarks: Based on data from similar materials

EC10 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201  
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC10: > 10 - 100 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Method: OECD Test Guideline 211  
Remarks: Based on data from similar materials

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

Toxicity to fish : LC50 (Cyprinodon variegatus (sheepshead minnow)): 16,7 mg/l  
Exposure time: 96 h  
Test Type: static test

LC50 (Oncorhynchus mykiss (rainbow trout)): 2,15 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2,9 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 0,070 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 0,04 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 1

Toxicity to microorganisms : EC50 (activated sludge): 24 mg/l  
Exposure time: 3 h  
Test Type: Respiration inhibition  
Method: OECD Test Guideline 209

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EC50 (activated sludge): 12,8 mg/l  
Exposure time: 3 h  
Test Type: Respiration inhibition  
Method: OECD Test Guideline 209

M-Factor (Chronic aquatic toxicity) : 1

### 12.2 Persistence and degradability

#### **Product:**

Biodegradability : Remarks: No data is available on the product itself.  
Product contains minor amounts of not readily biodegradable components, which may not be degradable in waste water treatment plants.

#### **Components:**

##### **Fluindapyr:**

Biodegradability : Result: Not readily biodegradable.

##### **Flutriafol:**

Biodegradability : Result: Not readily biodegradable.

Stability in water : Remarks: Does not readily hydrolyze

##### **propane-1,2-diol:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 23,6 %  
Exposure time: 64 d  
Method: OECD Test Guideline 306

##### **Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, phosphate, potassium salt:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 80 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301D  
Remarks: Based on data from similar materials

##### **Sodium alkyl naphthalenesulfonate formaldehyde condensate:**

Biodegradability : Result: Not readily biodegradable.  
Remarks: Based on data from similar materials

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

Biodegradability : Result: rapidly biodegradable  
Method: OECD Test Guideline 301C

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## 12.3 Bioaccumulative potential

**Product:**

Bioaccumulation : Remarks: No data is available on the product itself.

**Components:****Fluindapyr:**

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)  
Bioconcentration factor (BCF): < 500  
Method: OECD Test Guideline 305  
GLP: yes  
Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: > 3

**Flutriafol:**

Bioaccumulation : Species: Fish  
Bioconcentration factor (BCF): 7  
Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: 2,29

**propane-1,2-diol:**

Partition coefficient: n-octanol/water : log Pow: -1,07

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

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)  
Exposure time: 56 d  
Bioconcentration factor (BCF): 6,62  
Method: OECD Test Guideline 305  
Remarks: Substance is not persistent, bioaccumulative, and toxic (PBT).

Partition coefficient: n-octanol/water : log Pow: 0,7 (20 °C)  
pH: 7  
  
log Pow: 0,99 (20 °C)  
pH: 5

## 12.4 Mobility in soil

**Product:**

Distribution among environmental compartments : Remarks: No data is available on the product itself.

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### Components:

#### **Fluindapyr:**

Distribution among environmental compartments : Remarks: Low mobility in soil

#### **Flutriafol:**

Distribution among environmental compartments : Remarks: Moderately mobile in soils

Stability in soil : Remarks: Very persistent in soil.

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

Distribution among environmental compartments : Koc: 9,33 ml/g, log Koc: 0,97  
Method: OECD Test Guideline 121  
Remarks: Highly mobile in soils

## 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.

## 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.

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Very toxic to aquatic life.  
Toxic to aquatic life with long lasting effects.

### Components:

#### **Flutriafol:**

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Toxic to aquatic life with long lasting effects.

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### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

- |                        |   |
|------------------------|---|
| Product                | : The product should not be allowed to enter drains, water courses or the soil.<br>Do not contaminate ponds, waterways or ditches with chemical or used container.<br>Send to a licensed waste management company.                                    |
| Contaminated packaging | : Empty remaining contents.<br>Do not re-use empty containers.<br>Packaging that is not properly emptied must be disposed of as the unused product.<br>Empty containers should be taken to an approved waste handling site for recycling or disposal. |

### SECTION 14: Transport information

#### 14.1 UN number

- |      |           |
|------|-----------|
| ADR  | : UN 3082 |
| IMDG | : UN 3082 |
| IATA | : UN 3082 |

#### 14.2 UN proper shipping name

- |      |   |
|------|---|
| ADR  | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.<br>(Fluindapyr, Flutriafol) |
| IMDG | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.<br>(Fluindapyr, Flutriafol) |
| IATA | : Environmentally hazardous substance, liquid, n.o.s.<br>(Fluindapyr, Flutriafol) |

#### 14.3 Transport hazard class(es)

- |      | Class | Subsidiary risks |
|------|-------|------------------|
| ADR  | : 9   |                  |
| IMDG | : 9   |                  |
| IATA | : 9   |                  |

#### 14.4 Packing group

- |                              |       |
|------------------------------|-------|
| ADR                          |       |
| Packing group                | : III |
| Classification Code          | : M6  |
| Hazard Identification Number | : 90  |
| Labels                       | : 9   |
| Tunnel restriction code      | : (-) |

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### IMDG

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

### IATA (Cargo)

Packing instruction (cargo aircraft)	: 964
Packing instruction (LQ)	: Y964
Packing group	: III
Labels	: Miscellaneous

### IATA (Passenger)

Packing instruction (passenger aircraft)	: 964
Packing instruction (LQ)	: Y964
Packing group	: III
Labels	: Miscellaneous

## 14.5 Environmental hazards

### ADR

Environmentally hazardous	: yes
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### IMDG

Marine pollutant	: yes
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### IATA (Passenger)

Environmentally hazardous	: yes
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### IATA (Cargo)

Environmentally hazardous	: yes
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## 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

#### The components of this product are reported in the following inventories:

TCSI	: Not in compliance with the inventory
TSCA	: Product contains substance(s) not listed on TSCA inventory.
AIIC	: Not in compliance with the inventory



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DSL	: This product contains chemical substance(s) exempt from CEPA DSL Inventory requirements. It is regulated as a pesticide subject to Pest Control Products Act (PCPA) requirements. Read the PCPA label, authorized under the Pest Control Products Act, prior to using or handling this pest control product.
ENCS	: Not in compliance with the inventory
ISHL	: Not in compliance with the inventory
KECI	: Not in compliance with the inventory
PICCS	: Not in compliance with the inventory
IECSC	: Not in compliance with the inventory
NZIoC	: Not in compliance with the inventory
TECI	: Not in compliance with the inventory

### 15.2 Chemical safety assessment

A chemical safety assessment is not required for this product (mixture).

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## 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.
H319	: Causes serious eye irritation.
H330	: Fatal if inhaled.
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.
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
Eye Irrit.	: Eye irritation
Skin Irrit.	: Skin irritation
Skin Sens.	: Skin sensitisation
UA OEL	: Ukraine OEL - Order on Approval of the Hygienic Regulations of Chemicals in the Air of the Working Zone
UA OEL / MAC	: Maximum allowable concentration

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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 - 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:

Acute Tox. 4	H302
Acute Tox. 4	H332
Aquatic Acute 1	H400
Aquatic Chronic 2	H411

#### Classification procedure:

Based on product data or assessment
Based on product data or assessment
Based on product data or assessment
Calculation method

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