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

1.1 Product identifier

Product name SAFARI® DUOACTIVE

Other means of identification

Product code 50000095

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

Use of the Sub- : Herbicide

stance/Mixture

Recommended restrictions

on use

: Use as recommended by the label.

1.3 Details of the supplier of the safety data sheet

Supplier Address FMC Agro Limited

Rectors Lane, Pentre

Flintshire CH5 2DH United Kingdom

Telephone: + 44 1244 537370 E-mail address: SDS-Info@fmc.com .

1.4 Emergency telephone number

For leak, fire, spill or accident emergencies, call: England and Wales: 44-870-8200418 (CHEMTREC)

Medical emergency: England and Wales: 111 Scotland: 84 54 24 2424

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Carcinogenicity, Category 2 H351: Suspected of causing cancer.

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Short-term (acute) aquatic hazard, Cate-

gory 1

H400: Very toxic to aquatic life.

Long-term (chronic) aquatic hazard, Cat-

egory 1

H410: Very toxic to aquatic life with long lasting

effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Hazard pictograms





Signal word : Warning

Hazard statements : H351 Suspected of causing cancer.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : P201 Obtain special instructions before use.

Prevention:

P280 Wear protective gloves/ protective clothing/ eye protec-

tion/ face protection.

Response:

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

attention.

P391 Collect spillage.

Disposal:

P501 Dispose of contents / container to a licensed hazardous-waste disposal contractor or collection site except for emp-

ty clean containers which can be disposed of as non-

hazardous waste.

Hazardous components which must be listed on the label:

lenacil (ISO)

triflusulfuron-methyl

Additional Labelling

EUH401 To avoid risks to human health and the environment, comply with the instruc-

tions for use.

For special phrases (SP) and safety intervals, consult the label.

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.	Classification	Concentration
	EC-No.		(% w/w)
	Index-No.		
. " (12.2)	Registration number		
lenacil (ISO)	2164-08-1	Carc. 2; H351	>= 50 - < 72
	218-499-0	Aquatic Acute 1;	
	613-320-00-6	H400	
		Aquatic Chronic 1; H410	
		M-Factor (Acute	
		aquatic toxicity): 10	
		M-Factor (Chronic	
		aquatic toxicity): 10	
triflusulfuron-methyl	126535-15-7	Carc. 2; H351	>= 2.5 - < 10
		Aquatic Acute 1;	
	607-714-00-7	H400	
		Aquatic Chronic 1; H410	
		M-Factor (Acute	
		aquatic toxicity):	
		100	
		M-Factor (Chronic	
	00540.04.5	aquatic toxicity): 10	4 40
Lignosulfonic acid, sodium salt, sulfomethylated	68512-34-5	Eye Irrit. 2; H319	>= 1 - < 10
sodium diisopropylnaphthalenesul-	1322-93-6	Acute Tox. 4; H302	>= 1 - < 2.5
phonate	215-343-3	Skin Corr. 1; H314	
		Eye Dam. 1; H318	
		Aquatic Chronic 3; H412	
Substances with a workplace exposur	re limit :	•	
kaolin	1332-58-7		>= 1 - < 10
	310-194-1		

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.

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If inhaled : Remove to fresh air.

If unconscious, place in recovery position and seek medical

advice.

Consult a physician after significant exposure.

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 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.

If symptoms persist, call a physician. Take victim immediately to hospital.

Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Risks : Suspected of causing cancer.

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, CO2, water spray or regular foam.

Unsuitable extinguishing

media

High volume water jet

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 prod: :

ucts

Thermal decomposition can lead to release of irritating gases

and vapours.

Nitrogen oxides (NOx) Hydrogen fluoride Sulphur oxides Carbon oxides

Fluorinated compounds

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5.3 Advice for firefighters

Special protective equipment :

for firefighters

Wear self-contained breathing apparatus for firefighting if nec-

essary.

Further information : 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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

Avoid dust formation. Avoid breathing dust.

If it can be safely done, stop the leak.

Keep people away from and upwind of spill/leak.

Remove all sources of ignition.

Immediately evacuate personnel to safe areas.

Ensure adequate ventilation.

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 product from entering drains.

Prevent further leakage or spillage if safe to do so.

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 : Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of respirable particles.

Do not breathe vapours/dust.

Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes. For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the ap-

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plication area.

Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national

regulations.

Advice on protection against

fire and explosion

Avoid dust formation. Provide appropriate exhaust ventilation

at places where dust is formed.

Hygiene measures : 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 resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must

comply with the technological safety standards.

Further information on stor-

age conditions

The product is stable under normal conditions of warehouse storage. 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 stor-

age 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.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
kaolin	1332-58-7	TWA (Respirable	2 mg/m3	GB EH40
		dust)		
		TWA (Respirable	0.1 mg/m3	2004/37/EC
		dust)		
Further information	Carcinogens or mutagens			

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8.2 Exposure controls

Personal protective equipment

Eye 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 : Dust impervious protective suit

Choose body protection according to the amount and concen-

tration of the dangerous substance at the work place.

Respiratory protection : Use respiratory protection unless adequate local exhaust ven-

tilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Equipment should conform to EN 143

Filter type : Particulates type (P)

Protective measures : Plan first aid action before beginning work with this product.

Always have on hand a first-aid kit, together with proper in-

structions.

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 instruc-

tions for use.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : solid

Form : granular

Colour : brown

Odour : slight

pH : 8.3 (25 °C)

Concentration: 1 %

Relative vapour density : not determined

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Solubility(ies)

Water solubility : dispersible

9.2 Other information

Particle size : No data available

Particle Size Distribution : 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.

Dust may form explosive mixture in air.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

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

Not classified based on available information.

Product:

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

Method: OECD Test Guideline 425

GLP: yes

Remarks: Information source: Internal study report

(Data on the product itself)

Acute inhalation toxicity : LC50 (Rat): > 5.13 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

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GLP: yes

Remarks: Information source: Internal study report

(Data on the product itself)

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

Method: OECD Test Guideline 402

GLP: yes

Remarks: Information source: Internal study report

(Data on the product itself)

Components:

lenacil (ISO):

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

Method: OECD Test Guideline 423

Remarks: Information source: Internal study report

Acute inhalation toxicity : LC50 (Rat): > 5.12 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Remarks: Information source: Internal study report

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

Method: OECD Test Guideline 402

Remarks: Information source: Internal study report

triflusulfuron-methyl:

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

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 5.1 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Method: OECD Test Guideline 402

Lignosulfonic acid, sodium salt, sulfomethylated:

Acute oral toxicity : LD50 (Rat, female): > 10 g/kg

sodium diisopropylnaphthalenesulphonate:

Acute oral toxicity : LD50 (Rat, female): > 300 - 2,000 mg/kg

Method: OECD Test Guideline 423

kaolin:

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

Method: OECD Test Guideline 401

LD50: > 2,000 mg/kg

Method: OECD Test Guideline 420

Assessment: The substance or mixture has no acute oral tox-

icity

Acute inhalation toxicity : LD50: 5.07 mg/l

Method: OECD Test Guideline 436

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

LD50: > 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

GLP : yes

Remarks : Information source: Internal study report

(Data on the product itself)

Components:

lenacil (ISO):

Species : Rabbit

Assessment : Not classified as irritant
Method : OECD Test Guideline 404

Result : No skin irritation

Remarks : Information source: Internal study report

triflusulfuron-methyl:

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

Lignosulfonic acid, sodium salt, sulfomethylated:

Result : No skin irritation

sodium diisopropylnaphthalenesulphonate:

Species : reconstructed human epidermis (RhE)

Method : OECD Test Guideline 431

Result : Corrosive after 4 hours or less of exposure

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kaolin:

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

GLP : yes

Remarks : Information source: Internal study report

(Data on the product itself)

Components:

lenacil (ISO):

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Remarks : Minimal effects that do not meet the threshold for classifica-

tion.

Information source: Internal study report

triflusulfuron-methyl:

Species : Rabbit

Method : OECD Test Guideline 405

Result : No eye irritation

Lignosulfonic acid, sodium salt, sulfomethylated:

Result : Eye irritation

sodium diisopropylnaphthalenesulphonate:

Species : Bovine cornea

Method : OECD Test Guideline 437
Result : Irreversible effects on the eye

kaolin:

Method : OECD Test Guideline 405

Result : No eye irritation

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

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Respiratory sensitisation

Not classified based on available information.

Product:

Test Type : Local lymph node test

Species : Mouse

Method : OECD Test Guideline 429

Result : Did not cause sensitisation on laboratory animals.

GLP : yes

Remarks : Information source: Internal study report

(Data on the product itself)

Components:

lenacil (ISO):

Exposure routes : Skin contact Species : Guinea pig

Assessment : Not a skin sensitizer.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.
Remarks : Information source: Internal study report

triflusulfuron-methyl:

Species : Guinea pig

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

Lignosulfonic acid, sodium salt, sulfomethylated:

Species : Guinea pig

Result : Not a skin sensitizer.

sodium diisopropylnaphthalenesulphonate:

Test Type : Direct Peptide Reactivity Assay (DPRA)

Method : OECD Test Guideline 442C
Result : Does not cause skin sensitisation.

kaolin:

Method : OECD Test Guideline 429

Result : Does not cause skin sensitisation.

Germ cell mutagenicity

Not classified based on available information.

Components:

lenacil (ISO):

Germ cell mutagenicity- As-

sessment

: Tests on bacterial or mammalian cell cultures did not show

mutagenic effects., Animal testing did not show any mutagenic

effects.

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triflusulfuron-methyl:

Genotoxicity in vitro : Test Type: Ames test

Result: negative

Germ cell mutagenicity- As-

sessment

Weight of evidence does not support classification as a germ

cell mutagen.

Lignosulfonic acid, sodium salt, sulfomethylated:

Genotoxicity in vitro : Test Type: reverse mutation assay

Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Remarks: No data available

sodium diisopropylnaphthalenesulphonate:

Genotoxicity in vitro : Test Type: reverse mutation assay

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Remarks: No data available

kaolin:

Genotoxicity in vitro : Test Type: Ames test

Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Remarks: No data available

Carcinogenicity

Suspected of causing cancer.

Components:

lenacil (ISO):

Species : Rat

Method : OECD Test Guideline 453

Symptoms : mammary tumors

Species : Mouse

Method : OECD Test Guideline 451

Symptoms : Lung alveolar tumour, Hepatocellular adenoma

Carcinogenicity - Assess-

ment

: Limited evidence of carcinogenicity in animal studies

triflusulfuron-methyl:

Species : Rat, male

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Dose : > 30 mg/kg/ bw/day

Method : OECD Test Guideline 453

Symptoms : Leydig-cell adenoma

Carcinogenicity - Assess-

ment

The observed tumors do not appear to be relevant for men.

Lignosulfonic acid, sodium salt, sulfomethylated:

Remarks : No data available

Reproductive toxicity

Not classified based on available information.

Components:

lenacil (ISO):

Reproductive toxicity - As-

sessment

: Animal testing did not show any effects on fertility.

Animal testing did not show any effects on foetal develop-

ment.

Lignosulfonic acid, sodium salt, sulfomethylated:

Effects on fertility : Remarks: No data available

Effects on foetal develop-

ment

Remarks: No data available

kaolin:

Effects on fertility : Remarks: No data available

Effects on foetal develop-

ment

Remarks: No data available

STOT - single exposure

Not classified based on available information.

Product:

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

organ toxicant, single exposure.

Components:

triflusulfuron-methyl:

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

organ toxicant, single exposure.

Lignosulfonic acid, sodium salt, sulfomethylated:

Remarks : No data available

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kaolin:

Remarks : No significant adverse effects were reported

STOT - repeated exposure

Not classified based on available information.

Product:

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

organ toxicant, repeated exposure.

Components:

triflusulfuron-methyl:

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

organ toxicant, repeated exposure.

Lignosulfonic acid, sodium salt, sulfomethylated:

Remarks : No data available

kaolin:

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

organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

lenacil (ISO):

Species : Rat Application Route : Oral Exposure time : 90 d

Method : OECD Test Guideline 408

Symptoms : Liver effects

Species : Mouse Application Route : Oral Exposure time : 90 d

Method : OECD Test Guideline 408 Symptoms : increased liver weight

Species : Dog Application Route : Oral Exposure time : 90 d

Method : OECD Test Guideline 408
Symptoms : Liver effects, Bladder effects

sodium diisopropylnaphthalenesulphonate:

Remarks : No data available

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kaolin:

Remarks : No data available

Aspiration toxicity

Not classified based on available information.

Components:

lenacil (ISO):

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

triflusulfuron-methyl:

No aspiration toxicity classification

Further information

Product:

Remarks : No data available

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 42 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

GLP: yes

Remarks: Information source: Internal study report

(Data on the product itself)

Toxicity to algae/aquatic

plants

ErC50 (Pseudokirchneriella subcapitata (green algae)):

0.0179 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

GLP: yes

Remarks: Information source: Internal study report

(Data on the product itself)

ErC50 (Lemna gibba (duckweed)): 0.0330 mg/l

Exposure time: 7 d

Method: OECD Test Guideline 221

GLP: yes

Remarks: Information source: Internal study report

(Data on the product itself)

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Components:

lenacil (ISO):

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

Exposure time: 96 h
Test Type: static test

Method: OECD Test Guideline 203

Remarks: Information source: Internal study report

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 8.4 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Remarks: Information source: Internal study report

Toxicity to algae/aquatic

plants

ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.016

mg/l

Exposure time: 96 h

Method: OECD Test Guideline 201

Remarks: Information source: Internal study report

ErC50 (Navicula pelliculosa (Diatom)): 0.096 mg/l

Exposure time: 72 h

ErC50 (Lemna gibba (gibbous duckweed)): 0.029 mg/l

Exposure time: 7 d

Method: OECD Test Guideline 221

Remarks: Information source: Internal study report

NOEC (Lemna gibba (duckweed)): 0.0088 mg/l

Exposure time: 7 d

M-Factor (Acute aquatic tox-

icity)

10

Toxicity to fish (Chronic tox-

icity)

NOEC: 0.16 mg/l

Exposure time: 90 d

Species: Oncorhynchus mykiss (rainbow trout)

Method: OECD Test Guideline 210

Remarks: Information source: Internal study report

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 0.48 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Remarks: Information source: Internal study report

M-Factor (Chronic aquatic

toxicity)

10

Toxicity to soil dwelling or-

ganisms

LC50: > 1,000 mg/kg Exposure time: 14 d

Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207

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Remarks: Information source: Internal study report

Toxicity to terrestrial organ-

isms

LD50: 25 µg/bee Exposure time: 48 h

End point: Acute contact toxicity Species: Apis mellifera (bees)

Method: US EPA Test Guideline OPP 141-1 Remarks: Information source: Internal study report

LD50: > 2,000 mg/kg

Species: Anas platyrhynchos (Mallard duck) Method: US EPA Test Guideline OPP 71-1

Remarks: Information source: Internal study report

LC50: > 5,000 mg/kg Exposure time: 5 d

Species: Colinus virginianus (Bobwhite quail) Method: US EPA Test Guideline OPP 71-2 Remarks: Information source: Internal study report

triflusulfuron-methyl:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 730 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 884 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.5

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

ErC50 (Lemna gibba (gibbous duckweed)): 0.0035 mg/l

Exposure time: 14 h Method: ASTM E 1415-91

EC50 (green algae): 0.62 mg/l

Exposure time: 98 h

M-Factor (Acute aquatic tox-

icity)

100

Toxicity to fish (Chronic tox-

icity)

NOEC: 210 mg/l Exposure time: 21 d

Species: Oncorhynchus mykiss (rainbow trout)

Method: OECD Test Guideline 204

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC: 11 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

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M-Factor (Chronic aquatic

toxicity)

: 10

Toxicity to soil dwelling or-

ganisms

LC50: > 1,000 mg/kg Exposure time: 14 d

Species: Eisenia fetida (earthworms)

Toxicity to terrestrial organ-

isms

LC50: > 2,250 mg/kg

Species: Colinus virginianus (Bobwhite quail)

Method: EPA OPP 71-1

LC50: > 5,620 mg/kg

Species: Anas platyrhynchos (Mallard duck)

Method: EPA OPP 71-1

LD50: $> 25 \mu g/bee$

End point: Acute contact toxicity Species: Apis mellifera (bees)

Lignosulfonic acid, sodium salt, sulfomethylated:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 615 mg/l

Exposure time: 96 h

sodium diisopropylnaphthalenesulphonate:

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 72 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (algae)): > 100 mg/l

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (algae)): 10 mg/l

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

kaolin:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 1,000 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

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

100 mg/l

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Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to microorganisms

Remarks: No data available

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

Remarks: No data available

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: Product contains minor amounts of not readily bio-

degradable components, which may not be degradable in

waste water treatment plants.

Components:

lenacil (ISO):

Biodegradability : Result: Not readily biodegradable.

Remarks: Substance/product is moderately persistent in the

environment.

triflusulfuron-methyl:

Biodegradability : Result: Not readily biodegradable.

Stability in water : Remarks: Hydrolyses readily.

Lignosulfonic acid, sodium salt, sulfomethylated:

Biodegradability : Result: Not readily biodegradable.

Biodegradation: < 5 % Exposure time: 28 d

Method: OECD Test Guideline 301E

sodium diisopropylnaphthalenesulphonate:

Biodegradability : Inoculum: activated sludge, non-adapted

Result: Not readily biodegradable.

Biodegradation: 2 % Exposure time: 21 d

Method: OECD Test Guideline 301D

kaolin:

Biodegradability : Remarks: The methods for determining biodegradability are

not applicable to inorganic substances.

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12.3 Bioaccumulative potential

Product:

Remarks: Does not bioaccumulate. Bioaccumulation

Estimation based on data obtained on active ingredient.

Components:

lenacil (ISO):

Bioaccumulation Remarks: Low potential for bioaccumulation

Partition coefficient: n-

octanol/water

log Pow: 1.70 (25 °C)

triflusulfuron-methyl:

Bioaccumulation Remarks: Does not bioaccumulate.

Partition coefficient: n-

octanol/water

log Pow: 0.96 (25 °C)

pH: 7

log Pow: 2.3 (25 °C)

pH: 5

log Pow: -0.07 (25 °C)

pH: 9

Lignosulfonic acid, sodium salt, sulfomethylated:

Bioaccumulation Remarks: Low potential for bioaccumulation

Partition coefficient: n-

octanol/water

log Pow: -3.45

sodium diisopropylnaphthalenesulphonate:

Partition coefficient: n-

octanol/water

: $\log Pow: > 2.6 (20 °C)$

kaolin:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-

octanol/water

Remarks: Not applicable

12.4 Mobility in soil

Product:

mental compartments

Distribution among environ- : Remarks: No data is available on the product itself.

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Components:

lenacil (ISO):

Distribution among environmental compartments

Remarks: Moderately mobile in soils

triflusulfuron-methyl:

Distribution among environmental compartments

Remarks: Moderately mobile in soil at low pH.

Very mobile at high pH.

kaolin:

Distribution among environmental compartments Remarks: Low mobility in soil

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 poten-

tial

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 infor-

mation

See product label for additional application instructions relat-

ing to environmental precautions.

An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Very toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.

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Do not re-use empty containers.

Packaging that is not properly emptied must be disposed of as

the unused product.

Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

SECTION 14: Transport information

14.1 UN number

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

14.2 UN proper shipping name

ADN : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Lenacil, Triflusulfuron-methyl)

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S

(Lenacil, Triflusulfuron-methyl)

RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Lenacil, Triflusulfuron-methyl)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Lenacil, Triflusulfuron-methyl)

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

(Lenacil, Triflusulfuron-methyl)

14.3 Transport hazard class(es)

ADN : 9
ADR : 9
RID : 9
IMDG : 9
IATA : 9

14.4 Packing group

ADN

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

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ADR

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

RID

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

IMDG

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

IATA (Cargo)

Packing instruction (cargo : 956

aircraft)

Packing instruction (LQ) : Y956 Packing group : III

Labels : Miscellaneous

IATA (Passenger)

Packing instruction (passen- : 956

ger aircraft)

Packing instruction (LQ) : Y956
Packing group : III

Labels : Miscellaneous

14.5 Environmental hazards

ADN

Environmentally hazardous : yes

ADR

Environmentally hazardous : yes

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.

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

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

UK REACH List of substances subject to authorisation : Not applicable

(Annex XIV)

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

TCSI : On the inventory, or in compliance with the inventory

TSCA : Product contains substance(s) not listed on TSCA inventory.

AIIC : Not in compliance with the inventory

DSL : This product contains the following components that are not

on the Canadian DSL nor NDSL.

METHYL 2-({[4-(DIMETHYLAMINO)-6-(2,2,2-TRIFLUOROETHOXY)-1,3,5-TRIAZIN-2-

YL]CARBAMOYL}SULFAMOYL)-3-METHYLBENZOATE

: Not applicable

lenacil (ISO)

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).

SECTION 16: Other information

Full text of H-Statements

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H302 H314 H318 H319 H351 H400 H410		: : : : : : : : : : : : : : : : : : : :	Causes serious e Causes serious e Suspected of cau Very toxic to aqu Very toxic to aqu	kin burns and eye damage. eye damage. eye irritation. using cancer. atic life. atic life with long lasting effects.
H412		. :	Harmful to aquat	c life with long lasting effects.

Full text of other abbreviations

Acute Tox. : Acute toxicity

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

Carc. : Carcinogenicity
Eye Dam. : Serious eye damage

Eye Irrit. : Eye irritation Skin Corr. : Skin corrosion

2004/37/EC : Europe. Directive 2004/37/EC on the protection of workers

from the risks related to exposure to carcinogens or mutagens

at work

GB EH40 : UK. EH40 WEL - Workplace Exposure Limits

2004/37/EC / TWA : Long term exposure limit

GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)

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

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- United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Classification of the mixture: Classification procedure:

Carc. 2 H351 Calculation method

Aquatic Acute 1 H400 Based on product data or assessment

Aguatic Chronic 1 H410 Calculation method

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