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

1.1 Product identifier

Product name DEBUT®

Other means of identification

Product code 50000143

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

Use of the Sub- : Can be used as herbicide only.

stance/Mixture

Recommended restrictions

on use

Use as recommended by the label.

1.3 Details of the supplier of the safety data sheet

<u>Supplier Address</u> 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 : Prevention:

P201 Obtain special instructions before use.

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 as hazardous waste in

accordance with local regulations.

Hazardous components which must be listed on the label:

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.<br>EC-No.<br>Index-No.<br>Registration number | Classification   | Concentration<br>(% w/w) |  |
|--|---|--|--------------------------|--|
| triflusulfuron-methyl                        | 126535-15-7<br>607-714-00-7                           | Carc. 2; H351 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Carc. 2; H351 ——— M-Factor (Acute aquatic toxicity): 100 M-Factor (Chronic aquatic toxicity): 10 | >= 30 - < 50             |  |
| Substances with a workplace exposure limit : |   |  |                          |  |
| Talc (Mg3H2(SiO3)4)                          | 14807-96-6<br>238-877-9                               |  | >= 10 - < 20             |  |
| Sucrose                                      | 57-50-1<br>200-334-9                                  |  | >= 10 - < 20             |  |

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

personal protective equipment.

If inhaled : Remove to fresh air.

If unconscious, place in recovery position and seek medical

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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 ambu-

lance.

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 : Immediately flush eye(s) with plenty of water.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If swallowed : Obtain medical attention.

If swallowed, DO NOT induce vomiting unless directed to do

so by medical personnel. Rinse mouth with water.

Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Possibly irritation

Generally, sulphonylurea herbicides cause lethargy, confu-

sion, dizziness, seizures and coma on ingestion.

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.

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

Unsuitable extinguishing

media

Do not spread spilled material with high-pressure water

streams.

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.

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Hazardous combustion prod: :

ucts

Fire may produce irritating, corrosive and/or toxic gases.

Carbon oxides

Nitrogen oxides (NOx) Sulphur oxides Fluorine compounds

5.3 Advice for firefighters

Special protective equipment :

for firefighters

Use personal protective equipment.

Firefighters should wear protective clothing and self-contained breathing apparatus. Wear self-contained breathing apparatus

for firefighting if necessary.

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

Further information : If it can be safely done, move undamaged containers away

from the fire.

Standard procedure for chemical fires.

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 : Evacuate personnel to safe areas.

Do not touch or walk through the spilled material.

If it can be safely done, stop the leak.

Ensure adequate ventilation.

Use personal protective equipment.

Avoid dust formation. Avoid breathing dust.

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.

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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.

Pick up and transfer to properly labeled containers without

creating dust.

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-

plication area.

Dispose of rinse water in accordance with local and national

regulations.

Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

used.

Advice on protection against

fire and explosion

Normal measures for preventive fire protection.

Avoid dust formation. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated.

Hygiene measures : When using do not eat or drink. When using do not smoke.

Wash hands and face before breaks and immediately after

handling the product.

General industrial hygiene practice. Do not breathe dust.

Avoid contact with skin, eyes and clothing.

#### 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. Electrical installations / working materials must comply with the technological

safety standards. Observe label precautions.

Further information on stor-

age conditions

The product is stable under normal conditions of warehouse storage (0 - 40°C). Protect from frost and extreme heat. Store in closed, labelled containers. The storage room should be

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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.

Recommended storage tem: :

perature

5 - 30 °C

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      |
|------------------------|--|-------------------------------|--------------------|------------|
| Talc<br>(Mg3H2(SiO3)4) | 14807-96-6                                   | TWA (Respirable dust)         | 1 mg/m3            | GB EH40    |
|                        |  | TWA (Respirable dust)         | 0.1 mg/m3          | 2004/37/EC |
|                        | Further information: Carcinogens or mutagens |                               |                    |            |
| Sucrose                | 57-50-1                                      | TWA                           | 10 mg/m3           | GB EH40    |
|                        |  | STEL                          | 20 mg/m3           | GB EH40    |

#### **Derived No Effect Level (DNEL)**

| Substance name      | End Use | Exposure routes | Potential health effects   | Value      |
|---------------------|---------|-----------------|----------------------------|------------|
| Talc (Mg3H2(SiO3)4) | Workers | Inhalation      | Long-term systemic effects | 2.16 mg/m3 |

# **Predicted No Effect Concentration (PNEC)**

| Substance name      | Environmental Compartment     | Value           |
|---------------------|-------------------------------|-----------------|
| Talc (Mg3H2(SiO3)4) | Fresh water                   | 597.97 mg/l     |
|                     | Marine water                  | 141.26 mg/l     |
|                     | Fresh water sediment          | 31.33 mg/kg dry |
|                     |                               | weight (d.w.)   |
|                     | Marine sediment               | 3.13 mg/kg dry  |
|                     |                               | weight (d.w.)   |
|                     | Air                           | 10 mg/m3        |
|                     | Intermittent use (freshwater) | 597.97 mg/l     |

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Intermittent use (marine water) 141.26 mg/l

#### 8.2 Exposure controls

#### Personal protective equipment

Eye/face protection : Eye wash bottle with pure water

Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal processing

problems.

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 : powder
Colour : brown
Odour : odourless

Odour Threshold : No data available

pH : 8.3 (20 °C)

Concentration: 10 g/l 1 %

Melting point/freezing point : Decomposition

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Boiling point/boiling range :

Decomposition

Flash point : Not applicable

Evaporation rate : Not available for this mixture. Flammability (solid, gas) : Does not sustain combustion.

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 : not determined

Relative density

Density : No data available
Bulk density : 0.73 g/m3 loose
0.79 g/m3 packed

Solubility(ies)

Water solubility : Miscible

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

Not available for this mixture.

Auto-ignition temperature

Decomposition temperature

Viscosity

No data available

Not available for this mixture.

Viscosity, dynamic

Not applicable

Viscosity, kinematic : not determined

Explosive properties

Not explosive

Oxidizing properties : The product is not oxidizing.

9.2 Other information

Surface tension : Not applicable Molecular weight : Not applicable Minimum ignition energy : 250 - 500 mJ

Particle size : No data available
Particle Size Distribution : No data available

Self-ignition : > 140 °Cnot auto-flammable

# **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

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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.

Avoid extreme temperatures

Avoid dust formation.

Heating of the mixture may evolve harmful and irritant va-

pours.

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**

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

**Product:** 

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

Method: OECD Test Guideline 401

GLP: yes

Acute inhalation toxicity : LC50 (Rat): > 6.1 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

GLP: yes

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

Method: OECD Test Guideline 402

GLP: yes

Assessment: The component/mixture is minimally toxic after

single contact with skin.

**Components:** 

triflusulfuron-methyl:

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

Method: OECD Test Guideline 401

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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

Talc (Mg3H2(SiO3)4):

Acute oral toxicity : LD0 (Rat, male): > 5,000 mg/kg

Method: OECD Test Guideline 423

Remarks: no mortality

Acute inhalation toxicity : LC0 (Rat, male and female): > 2.1 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Remarks: no mortality

Acute dermal toxicity : LD0 (Rat, male and female): > 2,000 mg/kg

Method: OECD Test Guideline 402

Remarks: no mortality

Sucrose:

Acute oral toxicity : LD50 (Rat): 29,700 mg/kg

# Skin corrosion/irritation

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

**Product:** 

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

GLP : yes

**Components:** 

triflusulfuron-methyl:

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

Talc (Mg3H2(SiO3)4):

Species : reconstructed human epidermis (RhE)

Result : No skin irritation

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#### Serious eye damage/eye irritation

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

**Product:** 

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

GLP : yes

**Components:** 

triflusulfuron-methyl:

Species : Rabbit

Method : OECD Test Guideline 405

Result : No eye irritation

Talc (Mg3H2(SiO3)4):

Species : Rabbit

Method : OECD Test Guideline 405

Result : No eye irritation

Respiratory or skin sensitisation

Skin sensitisation

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

Respiratory sensitisation

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

**Product:** 

Test Type : Maximisation Test

Species : Guinea pig

Method : OECD Test Guideline 406

Result : Animal test did not cause sensitization by skin contact.

GLP : yes

Assessment : Causes serious eye damage.

**Components:** 

triflusulfuron-methyl:

Species : Guinea pig

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

Talc (Mg3H2(SiO3)4):

Test Type : Maximisation Test

Exposure routes : Dermal

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Species : Guinea pig

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

Exposure routes : Inhalation Species : Rat

Result : Does not cause respiratory sensitisation.

Germ cell mutagenicity

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

**Product:** 

Germ cell mutagenicity- As-

sessment

: Contains no ingredient listed as a mutagen

**Components:** 

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.

Talc (Mg3H2(SiO3)4):

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test

Result: negative

Test Type: gene mutation test

Method: QSAR Result: negative

Test Type: reverse mutation assay

Result: negative

Genotoxicity in vivo : Test Type: dominant lethal test

Species: Rat (male) Application Route: Oral Result: negative

Germ cell mutagenicity- As-

sessment

Weight of evidence does not support classification as a germ

cell mutagen.

Carcinogenicity

Suspected of causing cancer.

**Components:** 

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.

Talc (Mg3H2(SiO3)4):

Species : Rat, male and female

Application Route : Oral Exposure time : 101 days

Dose : 100 mg/kg bw/day

NOAEL : 100 mg/kg bw/day

Method : OECD Test Guideline 453

Result : negative Target Organs : Stomach

Tumor Type : Leiomyosarcoma

Carcinogenicity - Assess-

ment

Weight of evidence does not support classification as a car-

cinogen

#### Reproductive toxicity

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

**Product:** 

Reproductive toxicity - As-

sessment

: Contains no ingredient listed as toxic to reproduction

#### **Components:**

Talc (Mg3H2(SiO3)4):

Effects on fertility : Species: Rabbit, female

**Application Route: Oral** 

Dose: 9, 42, 195, 900 mg/kg bw/day

General Toxicity - Parent: NOAEL: > 900 mg/kg body weight General Toxicity F1: NOAEL: > 900 mg/kg body weight

Result: negative

Effects on foetal develop-

ment

Test Type: reproductive and developmental toxicity study

Species: Rat

**Application Route: Oral** 

Dose: 0,16,74,350,1600mg/kg bw/day Duration of Single Treatment: 20 d

General Toxicity Maternal: NOAEL: >= 1,600 mg/kg bw/day Embryo-foetal toxicity: NOAEL: 1,600 mg/kg bw/day

Result: negative

Reproductive toxicity - As-

sessment

Weight of evidence does not support classification for repro-

ductive toxicity

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#### STOT - single exposure

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

**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.

Talc (Mg3H2(SiO3)4):

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

organ toxicant, single exposure.

STOT - repeated exposure

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

**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.

Repeated dose toxicity

**Product:** 

Components:

Talc (Mg3H2(SiO3)4):

Species : Rat, male and female

NOAEL : 100 mg/kg Application Route : Oral - feed Exposure time : 101 d

Dose : 100 mg/kg bw/day

Species : Rat, male and female

NOAEL : 2 mg/m3 LOAEL : 6 mg/m3

Application Route : inhalation (dust/mist/fume)

Test atmosphere : dust/mist Exposure time : 20 d

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Dose :  $0, 2, 6, 18 \text{ mg/m}^3$ 

## **Aspiration toxicity**

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

#### **Product:**

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

#### **Components:**

#### triflusulfuron-methyl:

No aspiration toxicity classification

## **SECTION 12: Ecological information**

## 12.1 Toxicity

**Product:** 

Toxicity to fish : LC50 (Fish): 150 mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia (water flea)): 1,200 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.430

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

GLP: yes

EC50 (Lemna gibba (duckweed)): 0.0043 mg/l

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

GLP: yes

Toxicity to soil dwelling or-

ganisms

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

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

GLP:yes

Remarks: (Data on the product itself)
Information source: Internal study report

Toxicity to terrestrial organ-

isms

LD50: > 100 μg/bee

Exposure time: 48 h

End point: Acute oral toxicity

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Species: Apis mellifera (bees) Method: OECD Test Guideline 213

GLP:yes

Remarks: Information source: Internal study report

LD50: > 100 μg/bee Exposure time: 48 h

End point: Acute contact toxicity Species: Apis mellifera (bees) Method: OECD Test Guideline 214

GLP:yes

Remarks: Information source: Internal study report

**Ecotoxicology Assessment** 

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

**Components:** 

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-

NOEC: 11 mg/l Exposure time: 21 d

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ic toxicity) Species: Daphnia magna (Water flea)

M-Factor (Chronic aquatic

toxicity)

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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)

Talc (Mg3H2(SiO3)4):

Toxicity to fish : LC50 (Fish): 89,581.016 mg/l

Exposure time: 96 h Method: QSAR

Toxicity to daphnia and other :

aquatic invertebrates

LC50 (Daphnia magna (Water flea)): 36,812.359 mg/l

Exposure time: 48 h Method: QSAR

Toxicity to algae/aquatic

plants

NOEC (green algae): 918.089 mg/l

Exposure time: 30 d Method: QSAR

EC50 (green algae): 7,202.7 mg/l

Exposure time: 96 h Method: QSAR

Toxicity to fish (Chronic tox-

icity)

NOEC: 1,412.648 mg/l Exposure time: 30 d

Species: Fish Method: QSAR

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 1,459.798 mg/l Exposure time: 30 d

Species: Daphnia (water flea)

Method: QSAR

Sucrose:

Toxicity to fish : Remarks: No data available

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## 12.2 Persistence and degradability

**Product:** 

Biodegradability Result: Not readily biodegradable.

Remarks: Estimation based on data obtained on active ingre-

Product contains minor amounts of not readily biodegradable components, which may not be degradable in waste water

treatment plants.

**Components:** 

triflusulfuron-methyl:

Biodegradability : Result: Not readily biodegradable.

Stability in water Remarks: Hydrolyses readily.

Sucrose:

Biodegradability Remarks: No data available

12.3 Bioaccumulative potential

**Product:** 

Remarks: Does not bioaccumulate. Bioaccumulation

Estimation based on data obtained on active ingredient.

**Components:** 

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

Talc (Mg3H2(SiO3)4):

Bioaccumulation Bioconcentration factor (BCF): 3.16

Method: QSAR

Partition coefficient: n-

octanol/water

log Pow: -9.4 (25 °C)

pH: 7

Method: QSAR

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#### 12.4 Mobility in soil

**Product:** 

Distribution among environ-

mental compartments

Remarks: Moderately mobile in soil at low pH.

Very mobile at high pH.

Estimation based on data obtained on active ingredient.

**Components:** 

triflusulfuron-methyl:

Distribution among environmental compartments

Remarks: Moderately mobile in soil at low pH.

Very mobile at high pH.

#### 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

This substance/mixture does not contain components considered to have endocrine disrupting properties for environment

according to UK REACH Article 57(f).

Additional ecological infor-

mation

Environmental hazards

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water

mark.

Do not contaminate water when cleaning equipment or dis-

posing of equipment washwaters or rinsate.

Do not apply where/when conditions favour runoff.

See product label for additional application instructions relat-

ing to environmental precautions.

#### **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-

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cal or used container.

Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.

Triple rinse containers.

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.

(Triflusulfuron-methyl)

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S

(Triflusulfuron-methyl)

RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Triflusulfuron-methyl)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Triflusulfuron-methyl)

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

(Triflusulfuron-methyl)

#### 14.3 Transport hazard class(es)

Class Subsidiary risks

 ADN
 : 9

 ADR
 : 9

 RID
 : 9

 IMDG
 : 9

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**IATA** : 9

14.4 Packing group

**ADN** 

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

**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

aircraft)

Packing instruction (LQ) : Y956
Packing group : III

Labels : Miscellaneous

956

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)

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Environmentally hazardous : yes

IATA (Cargo)

Environmentally hazardous : yes

#### 14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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

Not applicable for product as supplied.

#### **SECTION 15: Regulatory information**

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

Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17) : Not applicable

UK REACH Candidate list of substances of very high : Not applicable

concern (SVHC) for Authorisation

The Persistent Organic Pollutants Regulations (retained : Not applicable

Regulation (EU) 2019/1021 as amended for Great Brit-

ain)

Regulation (EU) No 2024/590 on substances that de: Not applicable

plete the ozone layer

UK REACH List of substances subject to authorisation : Not applicable

(Annex XIV)

Control of Major Accident Hazards Regulations E1 ENVIRONMENTAL HAZARDS

2015 (COMAH)

#### Other regulations:

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to new and expectant mothers at work contained in Regulation 16 to 18) and of the Pregnant Workers Directive 92/85/EEC.

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to protection of young people at work contained in Regulation 19) and of Directive 94/33/EC on the protection of young people at work.

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

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

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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

Chlorite-group minerals

dolomite

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**

H351 : Suspected of causing cancer. H400 : Very toxic to aquatic life.

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

#### Full text of other abbreviations

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

Carc. : Carcinogenicity

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

from the risks related to exposure to carcinogens, mutagens

or reprotoxic substances at work - Annex III

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)
GB EH40 / STEL : Short-term exposure limit (15-minute reference period)

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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**

Other information :

#### Classification of the mixture: Classification procedure:

Carc. 2 H351 Calculation method

Aquatic Acute 1 H400 Based on product data or assessment
Aquatic Chronic 1 H410 Based on product data or assessment

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