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

1.1 Product identifier

Product name CONCERT® SX®

Other means of identification

Product code 50000969

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

<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)

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

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gory 1

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

Precautionary statements : Response:

P391 Collect spillage.

Disposal:

P501 Dispose of contents/container as hazardous waste in

accordance with local regulations.

#### **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.

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

#### 3.2 Mixtures

#### Components

Chemical name	CAS-No. EC-No.	Classification	Concentration (% w/w)
	Index-No.		(70 11/11)

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	Registration number			
thifensulfuron-methyl (ISO)	79277-27-3	Aquatic Acute 1; H400	>= 30 - < 50	
	016-096-00-2	Aquatic Chronic 1; H410		
		M-Factor (Acute aquatic toxicity): 100 M-Factor (Chronic		
		aquatic toxicity):		
sodium carbonate	497-19-8 207-838-8 011-005-00-2	Eye Irrit. 2; H319	>= 10 - < 20	
metsulfuron-methyl (ISO)	74223-64-6	Aquatic Acute 1; H400	>= 2.5 - < 10	
	613-139-00-2	Aquatic Chronic 1; H410		
		M-Factor (Acute aquatic toxicity): 1,000 M-Factor (Chronic aquatic toxicity): 1,000		
Substances with a workplace exposure limit :				
β-D-Fructofuranosyl-α-D-glucopyranoside	57-50-1 200-334-9		>= 1 - < 10	

For explanation of abbreviations see section 16.

# **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

General advice : Do not leave the victim unattended.

Show this safety data sheet to the doctor in attendance.

Move out of dangerous area.

If inhaled : 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 ambu-

lance.

In case of skin contact : If on clothes, remove clothes.

If on skin, rinse well with water.

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Wash off with soap and plenty of water.

Get medical attention if irritation develops and persists.

In case of eye contact : If eye irritation persists, consult a specialist.

Keep eye wide open while rinsing.

Protect unharmed eye. Remove contact lenses.

Flush eyes with water as a precaution.

If swallowed : Do not induce vomiting without medical advice.

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.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Possibly irritation

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.

Hazardous combustion prod: :

ucts

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

Sulphur oxides Carbon oxides

Nitrogen oxides (NOx)

5.3 Advice for firefighters

Special protective equipment :

for firefighters

Wear self-contained breathing apparatus for firefighting if nec-

essary.

Further information : Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

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Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

#### **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 : If the product contaminates rivers and lakes or drains inform

respective authorities.

Prevent further leakage or spillage if safe to do so.

Prevent product from entering drains.

#### 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 : Dispose of rinse water in accordance with local and national

regulations.

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

plication area.

For personal protection see section 8.

Advice on protection against

fire and explosion

Provide appropriate exhaust ventilation at places where dust

is formed.

Hygiene measures : Wash hands before breaks and at the end of workday.

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

Requirements for storage areas and containers

Electrical installations / working materials must comply with the technological safety standards. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep container tightly closed in a dry and well-

ventilated place.

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. 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 availa-

ble

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
β-D- Fructofuranosyl-α- D-glucopyranoside	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 ef-	Value
			fects	

# 8.2 Exposure controls

#### Personal protective equipment

Eye/face protection : Tightly fitting safety goggles

Eye wash bottle with pure water

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

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with the producers of the protective gloves.

Skin and body protection Choose body protection according to the amount and concen-

tration of the dangerous substance at the work place.

Dust impervious protective suit

Respiratory protection In case of dust exposure wear suitable personal respiratory

protection and protective suit.

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 granules Colour light brown Odour slight

Odour Threshold not determined pΗ 8.7 (25 °C)

Concentration: 10 g/l 1 %

(as a dispersion)

Melting point/freezing point Boiling point/boiling range

Not available for this mixture.

Decomposition Flash point not determined

Evaporation rate Not available for this mixture.

Flammability (solid, gas) Not highly flammable, may be ignitable

Upper explosion limit / Upper

flammability limit

not determined

Lower explosion limit / Lower

not determined

flammability limit

Vapour pressure Not available for this mixture.

Relative vapour density Not applicable

Relative density

Bulk density

0.696 g/cm3 packed

Solubility(ies)

Water solubility Miscible

Solubility in other solvents No data available

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Partition coefficient: n-

octanol/water

Not available for this mixture.

Auto-ignition temperature

Not applicable Decomposition temperature Not available for this mixture.

Viscosity

Viscosity, kinematic Not applicable Explosive properties Not explosive

Oxidizing properties The product is not oxidizing.

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 (Rat): > 5,000 mg/kg

Method: Fixed Dose Method

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

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

Method: OECD Test Guideline 402 Remarks: (Data on the product itself) Information source: Internal study report

Components:

thifensulfuron-methyl (ISO):

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

Acute inhalation toxicity : LC50 (Rat): > 5.03 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

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

sodium carbonate:

Acute oral toxicity : LD50 (Rat, male and female): 2,800 mg/kg

Acute inhalation toxicity : LC50 (Rat, male): 2.3 mg/l

Exposure time: 2 h

Test atmosphere: dust/mist

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

Target Organs: Skin Symptoms: Erythema

metsulfuron-methyl (ISO):

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

Method: US EPA Test Guideline OPP 81-1

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

icity

LD50 (Rat, female): > 5,000 mg/kg Method: OECD Test Guideline 425

GLP: yes

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

icity

Remarks: no mortality

Acute inhalation toxicity : LC50 (Rat, male and female): > 5.11 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: OECD Test Guideline 403

Symptoms: Breathing difficulties

GLP: yes

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Remarks: no mortality

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Acute dermal toxicity : LD50 (Rabbit, 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

β-D-Fructofuranosyl-α-D-glucopyranoside:

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

Skin corrosion/irritation

Not classified based on available information.

**Product:** 

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

Remarks : (Data on the product itself)

Information source: Internal study report

**Components:** 

thifensulfuron-methyl (ISO):

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

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

tion.

sodium carbonate:

Species : Rabbit Exposure time : 4 h

Method : OECD Test Guideline 404

Result : No skin irritation

metsulfuron-methyl (ISO):

Species : Rabbit

Assessment : Not classified as irritant

Method : US EPA Test Guideline OPP 81-5

Result : No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

**Product:** 

Species : Rabbit

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Method : OECD Test Guideline 405

Result : No eye irritation

Remarks : (Data on the product itself)

Information source: Internal study report

Components:

thifensulfuron-methyl (ISO):

Species : Rabbit

Method : OECD Test Guideline 405

Result : No eye irritation

sodium carbonate:

Species : Rabbit

Result : Irritation to eyes, reversing within 21 days

metsulfuron-methyl (ISO):

Species : Rabbit

Method : OECD Test Guideline 405

Result : No eye irritation

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

**Product:** 

Test Type : Maximisation Test Species : Guinea pig

Method : OECD Test Guideline 406

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

Remarks : (Data on the product itself)

Information source: Internal study report

**Components:** 

thifensulfuron-methyl (ISO):

Test Type : Maximisation Test Species : Guinea pig

Method : OECD Test Guideline 429

Result : Does not cause skin sensitisation.

metsulfuron-methyl (ISO):

Test Type : Maximisation Test Exposure routes : Skin contact

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**Species** Guinea pig

Method US EPA Test Guideline OPPTS 870.2600

Not a skin sensitizer. Result

Germ cell mutagenicity

Not classified based on available information.

**Product:** 

sessment

Germ cell mutagenicity- As- : Contains no ingredient listed as a mutagen

**Components:** 

thifensulfuron-methyl (ISO):

Genotoxicity in vitro Test system: Chinese hamster ovary cells

Method: OECD Test Guideline 476

Result: negative

Remarks: In vitro tests did not show mutagenic effects

Germ cell mutagenicity- As-

sessment

Weight of evidence does not support classification as a germ

cell mutagen.

sodium carbonate:

Genotoxicity in vitro Test Type: reverse mutation assay

Method: Mutagenicity (Salmonella typhimurium - reverse mu-

tation assay) Result: negative

Remarks: Based on data from similar materials

Germ cell mutagenicity- As-

sessment

Weight of evidence does not support classification as a germ

cell mutagen.

metsulfuron-methyl (ISO):

Genotoxicity in vitro Test Type: Ames test

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

GLP: yes

Test Type: Chromosome aberration test in vitro Metabolic activation: Metabolic activation

Result: positive GLP: yes

Genotoxicity in vivo Test Type: Micronucleus test

Species: Mouse Result: negative

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#### Carcinogenicity

Not classified based on available information.

**Product:** 

Carcinogenicity - Assess-

ment

Contains no ingredient listed as a carcinogen

**Components:** 

thifensulfuron-methyl (ISO):

Carcinogenicity - Assess-

ment

Weight of evidence does not support classification as a car-

cinogen

metsulfuron-methyl (ISO):

Species : Rat, male and female

Exposure time : 104 weeks NOAEL : 500 ppm Result : negative

Species : Mouse, male and female

Exposure time : 18 month(s)

NOAEL : 5,000 ppm

Result : negative

Reproductive toxicity

Not classified based on available information.

**Product:** 

Reproductive toxicity - As-

sessment

: Contains no ingredient listed as toxic to reproduction

**Components:** 

thifensulfuron-methyl (ISO):

Reproductive toxicity - As-

sessment

: Did not show teratogenic effects in animal experiments.

sodium carbonate:

Effects on foetal develop-

ment

Species: Rat

Application Route: Oral

Dose: 2.45, 11.4, 52.9, 245 milligram per kilogram

Duration of Single Treatment: 6 - 15 d

General Toxicity Maternal: NOAEL: > 245 mg/kg body weight

Teratogenicity: NOAEL: > 245 mg/kg body weight

Result: negative

Reproductive toxicity - As-

sessment

: Weight of evidence does not support classification for repro-

ductive toxicity

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metsulfuron-methyl (ISO):

Effects on fertility : Test Type: Two-generation study

Species: Rat, male and female

Application Route: Oral Result: negative

Effects on foetal develop-

ment

Test Type: Embryo-foetal development

Species: Rabbit, female Application Route: Ingestion Symptoms: Maternal effects

Result: negative

Test Type: Embryo-foetal development

Species: Rat, female

Application Route: Ingestion Symptoms: Maternal effects

Result: negative

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

**Components:** 

sodium carbonate:

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

organ toxicant, repeated exposure.

Repeated dose toxicity

**Components:** 

thifensulfuron-methyl (ISO):

Species : Rat

LOAEL : ca. 200 mg/kg

Exposure time : 90 d

Target Organs : No specific target organs noted

Symptoms : Reduced body weight

sodium carbonate:

Species : Rat, male and female

NOAEL : > 0.01 mg/kg

Application Route : inhalation (dust/mist/fume)

Test atmosphere : dust/mist

metsulfuron-methyl (ISO):

Species : Rat, male and female

NOEL : 1000 ppm

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Application Route : Oral - feed Exposure time : 90 days

Symptoms : Reduced body weight

**Aspiration toxicity** 

Not classified based on available information.

**Neurological effects** 

**Components:** 

metsulfuron-methyl (ISO):

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 (Oncorhynchus mykiss (rainbow trout)): > 130 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203 Remarks: (Data on the product itself) Information source: Internal study report

Toxicity to daphnia and other :

aquatic invertebrates

LC50 (Daphnia magna (Water flea)): > 130 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202 Remarks: (Data on the product itself) Information source: Internal study report

Toxicity to algae/aquatic

plants

: EbC50 (Pseudokirchneriella subcapitata (green algae)): 0.609

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201 Remarks: (Data on the product itself) Information source: Internal study report

EbC50 (Lemna gibba (duckweed)): 0.026 mg/l

Exposure time: 336 h

Method: US EPA Test Guideline OPPTS 850.4400

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

Toxicity to soil dwelling or- : LC50: > 1,000 mg/kg

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Exposure time: 14 d ganisms

> 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: > 0.100 mg/kgExposure time: 48 h

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

Remarks: Information source: Internal study report

(Data on the product itself)

#### **Components:**

thifensulfuron-methyl (ISO):

Toxicity to fish LC50 (Salmo gairdneri): 100 mg/l

Exposure time: 96 h

LC50 (Oncorhynchus mykiss (rainbow trout)): > 250 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 120 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

IC50 (green algae): 0.0159 mg/l

Exposure time: 72 h

ErC50 (Raphidocelis subcapitata (freshwater green alga)): 1.4

mg/l

Exposure time: 72 h

EC50 (Lemna minor (duckweed)): 1.3 μg/l

M-Factor (Acute aquatic tox-

icity)

100

Toxicity to fish (Chronic tox-

icity)

NOEC: 250 mg/l Exposure time: 28 d

Species: Salmo gairdneri

NOEC: 10.6 mg/l Exposure time: 21 d

Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

NOEC: 100 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

M-Factor (Chronic aquatic 100

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toxicity)

Toxicity to soil dwelling or-

ganisms

LC50: > 2,000 mg/kg

Species: Eisenia fetida (earthworms)

Toxicity to terrestrial organ-

isms

LD50: > 2,510 mg/kg

Species: Anas platyrhynchos (Mallard duck)

LD50: > 5,620 ppm

Species: Anas platyrhynchos (Mallard duck)

Remarks: Dietary

LD50: > 5,620 ppm

Species: Colinus virginianus (Bobwhite quail)

LD50: >  $7.1 \mu g/bee$ 

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

LD50: > 100 µg/bee

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

**Ecotoxicology Assessment** 

Acute aquatic toxicity : Very toxic to aquatic life.

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

sodium carbonate:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 300 mg/l

Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Ceriodaphnia (water flea)): 200 mg/l

Exposure time: 48 h Test Type: semi-static test

metsulfuron-methyl (ISO):

Toxicity to fish : LC50 (Poecilia reticulata (guppy)): > 100 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 120 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Metriod. OLCD Test Guideline 202

EC50 (Daphnia magna (Water flea)): 43.1 mg/l

End point: Immobilization Exposure time: 48 h Test Type: static test

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Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae/aquatic

plants

ErC50 (Anabaena flos-aquae (cyanobacterium)): 65.7 µg/l

Exposure time: 96 h

Method: OPPTS 850.5400

GLP: yes

NOEC (Anabaena flos-aquae (cyanobacterium)): 45 μg/l

Exposure time: 96 h Method: OPPTS 850.5400

GLP: yes

ErC50 (Selenastrum capricornutum (green algae)): 157 μg/l

Exposure time: 72 h

GLP: yes

NOEC (Selenastrum capricornutum (green algae)): 50 µg/l

Exposure time: 72 h

GLP: yes

M-Factor (Acute aquatic tox-

icity)

1.000

Toxicity to fish (Chronic tox-

icity)

NOEC: 68 mg/l

Exposure time: 21 d

Species: Oncorhynchus mykiss (rainbow trout)

NOEC: 10 mg/l

End point: reproduction Exposure time: 21 d

Species: Pimephales promelas (fathead minnow)

Method: OECD Test Guideline 229

GLP: yes

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 3.13 mg/l End point: reproduction

Exposure time: 21 d

Species: Daphnia magna (Water flea)

Test Type: semi-static test

Method: OECD Test Guideline 211

NOEC: 0.5 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

M-Factor (Chronic aquatic

toxicity)

1,000

Toxicity to soil dwelling or-

ganisms

NOEC: 6 mg/kg Exposure time: 56 d

Species: Eisenia fetida (earthworms)

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NOEC: 5.6 mg/kg End point: reproduction

Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 222

GLP:yes

Method: OECD Test Guideline 216

Remarks: No significant adverse effect on nitrogen mineraliza-

tion.

Toxicity to terrestrial organ-

isms

LD50: > 50 µg/bee

Exposure time: 48 h

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

Method: OEPP/EPPO Test Guideline 170

LD50: > 50 µg/bee Exposure time: 48 h

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

Method: OEPP/EPPO Test Guideline 170

LD50: > 2,510 mg/kg

Species: Anas platyrhynchos (Mallard duck)

NOEC: 1,000 mg/kg

End point: Reproduction Test Species: Colinius virginianus

NOEC: 1,000 ppm

End point: Reproduction Test

Species: Anas platyrhynchos (Mallard duck)

Method: OECD Test Guideline 206

#### β-D-Fructofuranosyl-α-D-glucopyranoside:

Toxicity to fish : Remarks: No data available

# 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:**

thifensulfuron-methyl (ISO):

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Biodegradability Remarks: Not readily biodegradable.

Primary degradation half-lives vary with circumstances, from a

few days to a few weeks in aerobic water and soil.

sodium carbonate:

Biodegradability Remarks: The methods for determining biodegradability are

not applicable to inorganic substances.

metsulfuron-methyl (ISO):

Biodegradability Result: Not readily biodegradable.

> Remarks: Primary degradation half-lives vary with circumstances, from a few weeks to a few months in aerobic soil and

water.

β-D-Fructofuranosyl-α-D-glucopyranoside:

Biodegradability : Remarks: No data available

12.3 Bioaccumulative potential

**Product:** 

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

**Components:** 

thifensulfuron-methyl (ISO):

Bioaccumulation Bioconcentration factor (BCF): 1

Remarks: Does not bioaccumulate.

sodium carbonate:

Bioaccumulation Remarks: Does not bioaccumulate.

metsulfuron-methyl (ISO):

Bioaccumulation Species: Lepomis macrochirus (Bluegill sunfish)

Exposure time: 28 d

Bioconcentration factor (BCF): < 1 Remarks: Does not bioaccumulate.

Partition coefficient: n-

Pow: 0.018 (25 °C) log Pow: -1.7 (25 °C) octanol/water

pH: 7

12.4 Mobility in soil

Product:

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

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mental compartments

**Components:** 

thifensulfuron-methyl (ISO):

Distribution among environ-

mental compartments Remarks: Highly mobile in soils

Stability in soil

metsulfuron-methyl (ISO):

Distribution among environmental compartments Remarks: Under normal conditions the substance/mixture is

mobile in soil.

12.5 Results of PBT and vPvB assessment

**Product:** 

Assessment : This substance/mixture contains no components considered

Koc: 28.3, log Koc: 1.45

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

Very toxic to aquatic life with long lasting effects.

An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

**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.

Do not re-use empty containers.

Packaging that is not properly emptied must be disposed of as

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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.

(Thifensulfuron-methyl, Metsulfuron-methyl)

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Thifensulfuron-methyl, Metsulfuron-methyl)

RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Thifensulfuron-methyl, Metsulfuron-methyl)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Thifensulfuron-methyl, Metsulfuron-methyl)

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

(Thifensulfuron-methyl, Metsulfuron-methyl)

#### 14.3 Transport hazard class(es)

Class Subsidiary risks

 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

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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 : 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

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Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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

Not applicable for product as supplied.

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

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

Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17) : Conditions of restriction for the fol-

lowing entries should be considered:

Number on list 3

Alcohols, C10-16 (Number on list 3)

Regulation (EU) No 2024/590 on substances that de-

plete the ozone layer

: Not applicable

UK REACH List of substances subject to authorisation

(Annex XIV)

: Not applicable

GB Export and import of hazardous chemicals - Prior

Informed Consent (PIC) Regulation

: Not applicable

Control of Major Accident Hazards Regulations E1

2015 (COMAH)

**ENVIRONMENTAL HAZARDS** 

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial and

livestock rearing emissions (integrated pollution prevention

and control)

Volatile organic compounds (VOC) content: < 0.01 %

# 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

DSL : This product contains the following components that are not

on the Canadian DSL nor NDSL.

MEM 20 SG TIM 50 SG

ENCS : Not in compliance with the inventory

ISHL : Not in compliance with the inventory

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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**

H319 : Causes serious eye irritation. 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

Eye Irrit. : Eye irritation

GB EH40 : UK. EH40 WEL - Workplace Exposure Limits

GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)
GB EH40 / STEL : Short-term exposure limit (15-minute 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

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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:

Aquatic Acute 1 H400 Based on product data or assessment

Aquatic Chronic 1 H410 Calculation method

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