According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



## Chlorsulfuron 625 g/kg + Metsulfuron-Methyl 125 g/kg DF

Version Revision Date: SDS Number: Date of last issue: -

1.0 01.06.2022 50001637 Date of first issue: 01.06.2022

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

#### 1.1 Product identifier

**Product name** Chlorsulfuron 625 g/kg + Metsulfuron-Methyl 125 g/kg DF

Other means of identification

Product code 50001637

## 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 Agricultural Solutions A/S

Thyborønvej 78

DK-7673 HARBOØRE

Denmark

Telephone: +45 9690 9690 Telefax: +45 9690 9691

E-mail address: SDS-Info@fmc.com (E-Mail General Infor-

mation)

#### 1.4 Emergency telephone number

For leak, fire, spill or accident emergencies, call:

Denmark: 45-69918573 (CHEMTREC)

Medical emergency: Denmark: +45 82 12 12 12

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

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

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

gory 1

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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)

Hazard pictograms

¥2>

Signal word : Warning

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

Precautionary statements : Prevention:

P273 Avoid release to the environment.

Response:

P391 Collect spillage.

Disposal:

P501 Dispose of contents/container in accordance with local

regulation.

**Additional Labelling** 

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

tions for use.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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

#### 3.2 Mixtures

Components

OL ' I	OAO NI	Ola 'C' C'	0
Chemical name	CAS-No.	Classification	Concentration

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	EC-No. Index-No. Registration number		(% w/w)
chlorsulfuron (ISO)	64902-72-3 265-268-5 613-121-00-4	Aquatic Acute 1; H400 Aquatic Chronic 1; H410  M-Factor (Acute aquatic toxicity): 1.000 M-Factor (Chronic aquatic toxicity): 100	>= 50 - < 70
metsulfuron-methyl (ISO)	74223-64-6 613-139-00-2	Aquatic Acute 1; H400 Aquatic Chronic 1; H410  M-Factor (Acute aquatic toxicity): 1.000 M-Factor (Chronic aquatic toxicity): 1.000	>= 10 - < 20
Residues (petroleum), catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts	68425-94-5	Eye Irrit. 2; H319 Aquatic Chronic 3; H412	>= 2,5 - < 10
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodi- um salts	68439-57-6 270-407-8	Skin Irrit. 2; H315 Eye Dam. 1; H318	>= 1 - < 3

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.

If inhaled : If unconscious, place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

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.

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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.

Do not induce vomiting without medical advice.

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

None known.

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

Treatment : Treat symptomatically.

### **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

Hazardous combustion products

Sulphur oxides

Halogenated compounds Nitrogen oxides (NOx)

Carbon oxides

Chlorinated compounds

Thermal decomposition can lead to release of irritating gases

and vapours.

#### 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.

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#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Avoid dust formation.

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 : 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.

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.

#### 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.

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

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approved by country-specific regulatory authorities.

## **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

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

Substance name	End Use	Exposure routes	Potential health effects	Value
Sulfonic acids, C14- 16-alkane hydroxy and C14-16-alkene, sodium salts	Workers	Inhalation	Long-term systemic effects	152,22 mg/m3
	Workers	Dermal	Long-term systemic effects	158,33 mg/kg
	Consumers	Inhalation	Long-term systemic effects	45,04 mg/m3
	Consumers	Dermal	Long-term systemic effects	295 mg/kg
	Consumers	Oral	Long-term systemic effects	12,95 mg/kg

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

Substance name	Environmental Compartment	Value
Sulfonic acids, C14-16-alkane	Fresh water	0,024 mg/l
hydroxy and C14-16-alkene,		
sodium salts		
	Intermittent use/release	0,0197 mg/l
	Marine water	0,002 mg/l
	Sewage treatment plant	4 mg/l
	Fresh water sediment	0,767 mg/kg dry
		weight (d.w.)
	Marine sediment	0,077 mg/kg dry
		weight (d.w.)
	Soil	1,21 mg/kg dry
		weight (d.w.)

## 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.

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



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Skin and body protection : Dust impervious protective suit

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

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.

## **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

Appearance : solid, granules

Colour : off-white

Odour : odourless

Odour Threshold : not determined

Melting point/freezing point : not determined

Boiling point/boiling range : not determined

Flammability : No data available

Upper explosion limit / Upper

flammability limit

not determined

Lower explosion limit / Lower

flammability limit

: not determined

Flash point : not determined

Decomposition temperature : Not available for this mixture.

pH : 5,47 (21 °C)

In a 1% aqueous dispersion

Viscosity

Viscosity, kinematic : Not applicable

Solubility(ies)

Water solubility : dispersible

Partition coefficient: n-

octanol/water

: Not available for this mixture.

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



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Vapour pressure : Not available for this mixture.

Relative density : not determined

Bulk density : 0,596 g/m3Pour density

0,647 g/m3Tap density

Relative vapour density : not determined

Particle characteristics

Particle size : not determined

Particle Size Distribution : No data available

Shape : No data available

9.2 Other information

Explosives : Not explosive

Oxidizing properties : Non-oxidizing

Self-ignition : not determined

Evaporation rate : not determined

### **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.

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## **SECTION 11: Toxicological information**

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

#### **Acute toxicity**

Not classified based on available information.

**Product:** 

Acute oral toxicity : LD50 (Rat): 3.129 mg/kg

Method: OECD Test Guideline 425

Acute inhalation toxicity : LC50 (Rat): > 5,05 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

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

Method: OECD Test Guideline 402

**Components:** 

chlorsulfuron (ISO):

Acute oral toxicity : LD50 (Rat, male): 5.545 mg/kg

Method: Directive 67/548/EEC, Annex V, B.1.

LD50 (Rat, female): 6.293 mg/kg

Method: Directive 67/548/EEC, Annex V, B.1.

Acute inhalation toxicity : LC50 (Rat): > 5,2 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat): > 3.400 mg/kg

Method: Regulation (EC) No. 440/2008, Annex, B.3

metsulfuron-methyl (ISO):

Acute oral toxicity : LD50 (Rat, male and female): > 5.000 mg/kg

Method: US EPA Test Guideline OPP 81-1

Acute inhalation toxicity : LC50 (Rat): > 5,3 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: US EPA Test Guideline OPPTS 870.1300

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rabbit, male and female): > 2.000 mg/kg

Method: US EPA Test Guideline OPP 81-2

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Residues (petroleum), catalytic reformer fractionator, sulfonated, polymers with formalde-

hyde, sodium salts:

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

Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts:

Acute oral toxicity : LD50 Oral (Rat, male and female): 2.290 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 52 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rabbit): 6.300 mg/kg

Method: OECD Test Guideline 402

Skin corrosion/irritation

Not classified based on available information.

**Product:** 

Assessment : No skin irritation

Method : OECD Test Guideline 404 Remarks : May cause mild irritation.

Minimal effects that do not meet the threshold for classifica-

tion.

Components:

chlorsulfuron (ISO):

Method : Directive 67/548/EEC, Annex V, B.4.

Result : No skin irritation

metsulfuron-methyl (ISO):

Species : Rabbit

Method : US EPA Test Guideline OPP 81-5

Result : No skin irritation

Residues (petroleum), catalytic reformer fractionator, sulfonated, polymers with formalde-

hyde, sodium salts:

Remarks : No data available

Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Skin irritation

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#### Serious eye damage/eye irritation

Not classified based on available information.

Product:

Assessment : No eye irritation

Method : OECD Test Guideline 405 Remarks : May cause mild irritation.

Minimal effects that do not meet the threshold for classifica-

tion.

**Components:** 

chlorsulfuron (ISO):

Assessment : No eye irritation

Method : Directive 67/548/EEC, Annex V, B.5.

Remarks : May cause mild irritation.

Minimal effects that do not meet the threshold for classifica-

tion.

metsulfuron-methyl (ISO):

Species : Rabbit

Method : EPA OPP 81-4
Result : slight irritation

Residues (petroleum), catalytic reformer fractionator, sulfonated, polymers with formalde-

hyde, sodium salts:

Result : Eye irritation

Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts:

Species : Rabbit

Method : OECD Test Guideline 405
Result : Irreversible effects on the eye

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

**Product:** 

Assessment : Did not cause sensitisation on laboratory animals.

Method : OECD Test Guideline 429
Result : Not a skin sensitizer.

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#### **Components:**

chlorsulfuron (ISO):

Exposure routes : Skin contact Species : Guinea pig

Assessment : Not a skin sensitizer.

Method : Directive 67/548/EEC, Annex V, B.6.

: Not a skin sensitizer. Result

metsulfuron-methyl (ISO):

Test Type **Maximisation Test** Exposure routes Skin contact Species Guinea pig

: US EPA Test Guideline OPPTS 870.2600 Method

Not a skin sensitizer. Result

Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts:

Test Type **Maximisation Test** 

**Species** Guinea pig

Method **OECD Test Guideline 406** Result Does not cause skin sensitisation.

Germ cell mutagenicity

Not classified based on available information.

**Product:** 

sessment

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

**Components:** 

chlorsulfuron (ISO):

Genotoxicity in vitro Test system: Chinese hamster ovary cells

Method: Regulation (EC) No. 440/2008, Annex, B.17

Result: negative

metsulfuron-methyl (ISO):

Genotoxicity in vitro Test Type: Ames test

Metabolic activation: with and without metabolic activation

Result: negative

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

Result: positive

Test Type: Micronucleus test Genotoxicity in vivo

Species: Mouse Result: negative

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Germ cell mutagenicity- As-

sessment

: Animal testing did not show any mutagenic effects.

### Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts:

Genotoxicity in vitro : Test Type: reverse mutation assay

Method: OECD Test Guideline 471

Result: negative

#### Carcinogenicity

Not classified based on available information.

**Product:** 

Carcinogenicity - Assess-

ment

: Contains no ingredient listed as a carcinogen

#### **Components:**

#### 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

Carcinogenicity - Assess-

ment

Animal testing did not show any carcinogenic effects.

#### Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts:

Species : Rat
Application Route : Oral
Exposure time : 104 weeks
Result : negative

#### Reproductive toxicity

Not classified based on available information.

**Product:** 

Reproductive toxicity - As-

: Contains no ingredient listed as toxic to reproduction

sessment

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#### **Components:**

### chlorsulfuron (ISO):

#### 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

Reproductive toxicity - As-

sessment

Weight of evidence does not support classification for repro-

ductive toxicity

#### Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts:

Effects on foetal develop-

ment

: Test Type: reproductive and developmental toxicity study

Species: Mouse

Application Route: Oral

Method: OECD Test Guideline 414

Result: negative

### STOT - single exposure

Not classified based on available information.

### STOT - repeated exposure

Not classified based on available information.

#### Components:

#### metsulfuron-methyl (ISO):

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

organ toxicant, repeated exposure.

#### Repeated dose toxicity

#### Components:

#### 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

### Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts:

Species : Rat

NOAEL : 195 mg/kg Application Route : Oral Exposure time : 104 weeks

Species : Rabbit
Application Route : Dermal
Exposure time : 105 weeks

Method : OECD Test Guideline 411

#### **Aspiration toxicity**

Not classified based on available information.

#### **Product:**

No aspiration toxicity classification

## 11.2 Information on other hazards

#### **Endocrine disrupting properties**

#### **Product:**

Assessment : The substance/mixture does not contain components consid-

ered 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.

## **Neurological effects**

#### **Components:**

#### metsulfuron-methyl (ISO):

No neurotoxicity observed in animal studies

#### **Further information**

## **Product:**

Remarks : Generally, sulphonylurea herbicides cause lethargy, confu-

sion, dizziness, seizures and coma on ingestion.

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### **SECTION 12: Ecological information**

#### 12.1 Toxicity

**Components:** 

chlorsulfuron (ISO):

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

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 370 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): 0.055

μg/l

EC50 (Lemna minor (duckweed)): 0.35 μg/l

M-Factor (Acute aquatic tox-

icity)

1.000

Toxicity to microorganisms : EC50 (Anabaena flos-aquae (cyanobacterium)): 0,61 mg/l

Toxicity to fish (Chronic tox-

icity)

NOEC: 32 mg/l

Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC: 20 mg/l

Species: Daphnia magna (Water flea)

M-Factor (Chronic aquatic

toxicity)

100

Toxicity to terrestrial organ-

isms

LD50: 25 µg/bee

Species: Apis mellifera (bees)

LC50: > 5.000 ppm

Species: Anas platyrhynchos (Mallard duck)

Remarks: Dietary

metsulfuron-methyl (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 113 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

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

Exposure time: 48 h

Toxicity to algae/aquatic

plants

EC50 (Lemna minor (duckweed)): 0,16 μg/l

Exposure time: 14 d

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EC50 (Anabaena flos-aquae (cyanobacterium)): 0,1134 mg/l

Exposure time: 72 h

IC50 (Selenastrum capricornutum (green algae)): 0,045 mg/l

Exposure time: 72 h

ErC50 (Myriophyllum spicatum): 0,23 μg/l

ErC50 (Lemna gibba (gibbous duckweed)): 0,57 μg/l

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)

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

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)

Toxicity to terrestrial organ-

isms

LD50: > 50 µg/bee

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

LD50: > 44,3 µg/bee

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

LD50: > 2.510 mg/kg

Species: Anas platyrhynchos (Mallard duck)

Residues (petroleum), catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts:

Toxicity to fish : LC50 (Zebra fish): > 10 - 100 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Remarks: Based on data from similar materials

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



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Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): > 100

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

EC10 (Pseudokirchneriella subcapitata (green algae)): > 100

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

EC10: > 10 - 100 mg/lExposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

Remarks: Based on data from similar materials

Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts:

LC50 (Danio rerio (zebra fish)): 4,2 mg/l Toxicity to fish

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Ceriodaphnia dubia (water flea)): 4,53 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Skeletonema costatum (marine diatom)): 5,2 mg/l

Exposure time: 72 h Method: ISO 10253

Toxicity to microorganisms EC50 (activated sludge): 230 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC: 6,3 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

### 12.2 Persistence and degradability

**Product:** 

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

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

treatment plants.

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



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**Components:** 

chlorsulfuron (ISO):

Biodegradability : Result: Not readily biodegradable.

metsulfuron-methyl (ISO):

Biodegradability : Result: Not readily biodegradable.

Remarks: According to the results of tests of biodegradability

this product is not readily biodegradable.

Residues (petroleum), catalytic reformer fractionator, sulfonated, polymers with formalde-

hyde, sodium salts:

Biodegradability : Result: Not readily biodegradable.

Remarks: Based on data from similar materials

Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 99,7 % Exposure time: 28 d

Method: OECD Test Guideline 301B

12.3 Bioaccumulative potential

**Product:** 

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

**Components:** 

chlorsulfuron (ISO):

Bioaccumulation : Remarks: Does not bioaccumulate.

Partition coefficient: n- : log Pow: 0,33 (25 °C)

octanol/water pH: 5,0

log Pow: -0,99 (25 °C)

pH: 7

log Pow: -1,41 (25 °C)

pH: 9

metsulfuron-methyl (ISO):

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)

Exposure time: 28 d

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

Partition coefficient: n- : log Pow: -1,7 (25 °C)

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octanol/water pH: 7

Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts:

Bioaccumulation Bioconcentration factor (BCF): 70,8

Partition coefficient: n-

octanol/water

log Pow: -1,3 (20 °C)

12.4 Mobility in soil

**Product:** 

mental compartments

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

Components:

chlorsulfuron (ISO):

Distribution among environmental compartments

Remarks: Moderately mobile in soil at low pH.

Very mobile at high pH.

metsulfuron-methyl (ISO):

Distribution among environ-

mental compartments

Remarks: Moderately mobile in soil

Risk of leaching to ground water is high for some degradation

products.

12.5 Results of PBT and vPvB assessment

**Product:** 

This substance/mixture contains no components considered Assessment

> to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

12.6 Endocrine disrupting properties

**Product:** 

Assessment The substance/mixture does not contain components consid-

> ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

12.7 Other adverse effects

Product:

Additional ecological infor-

mation

An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



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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.

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 or ID 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.

(Chlorsulfuron, Metsulfuron-methyl)

**ADR** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Chlorsulfuron, Metsulfuron-methyl)

RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Chlorsulfuron, Metsulfuron-methyl)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Chlorsulfuron, Metsulfuron-methyl)

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

(Chlorsulfuron, Metsulfuron-methyl)

#### 14.3 Transport hazard class(es)

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



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 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

#### **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

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**RID** 

Environmentally hazardous : yes

**IMDG** 

Marine pollutant : yes

IATA (Passenger)

Environmentally hazardous : yes

IATA (Cargo)

Environmentally hazardous : yes

#### 14.6 Special precautions for user

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

#### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

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

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances,

mixtures and articles (Annex XVII)

Not applicable

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

Not applicable

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

plete the ozone layer

Not applicable

Regulation (EU) 2019/1021 on persistent organic pollu-

tants (recast)

Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import

of dangerous chemicals

Not applicable

REACH - List of substances subject to authorisation

(Annex XIV)

Not applicable

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

E1 EN

**ENVIRONMENTAL HAZARDS** 

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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.

METHYL 2-{[(4-METHOXY-6-METHYL-1,3,5-TRIAZIN-2-

YL)CARBAMOYL]SULFAMOYL]BENZOATE

chlorsulfuron (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

No Chemical Safety Assessment has been carried out for this mixture.

#### **SECTION 16: Other information**

#### **Full text of H-Statements**

H315 : Causes skin irritation.

H318 : Causes serious eye damage. H319 : Causes serious eye irritation. H400 : Very toxic to aquatic life.

H410 : Very toxic to aquatic life with long lasting effects.H412 : Harmful to aquatic life with long lasting effects.

#### Full text of other abbreviations

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

Eye Dam. : Serious eye damage

Eye Irrit. : Eye irritation Skin Irrit. : Skin irritation

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

#### **Further information**

Other information : see user defined free text

Classification of the mixture: Classification procedure:

Aquatic Acute 1 H400 Calculation method
Aquatic Chronic 1 H410 Calculation method

#### **Disclaimer**

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