according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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

1.1 Product identifier

Product name CERVENTA™

Other means of identification

Product code 50000985

Unique Formula Identifier

(UFI)

: AR5X-K2K3-4N4S-RYC0

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.

For professional users only.

1.3 Details of the supplier of the safety data sheet

Supplier Address FMC Agro Bulgaria EOOD

> ISKARSKO SHOSE BLVD. NO.7 TRADE CENTER EUROPE BUILDING 7, OFFICE 8, FLOOR 4

1528 Sofia Bulgaria

Telephone: +359 (0) 2 818 5656 E-mail address: SDS-Info@fmc.com .

1.4 Emergency telephone number

For leak, fire, spill or accident emergencies, call: Bulgaria: +(359)-32570104 (CHEMTREC)

Medical emergency:

Clinic of Toxicology at the Hospital " N.I. Pirogov" Emergency telephone/fax: +359 2 9154 233

National number: 112

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

Eye irritation, Category 2 H319: Causes serious eye irritation.

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)

Hazard pictograms





Signal word : Warning

Hazard statements : H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : Prevention:

P261 Avoid breathing dust.

P280 Wear protective gloves/ protective clothing/ eye protec-

tion/ face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water and

soap.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P333 + P313 If skin irritation or rash occurs: Get medical

advice/ attention.

Disposal:

P501 Dispose of contents/container as hazardous waste in

accordance with local regulations.

Hazardous components which must be listed on the label:

tribenuron-methyl (ISO)

Additional Labelling

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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EUH212 Warning! Hazardous respirable dust may be formed when used. Do not breathe

dust.

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.

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

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
florasulam (ISO)	145701-23-1 613-230-00-7	Aquatic Acute 1; H400 Aquatic Chronic 1; H410 ——— M-Factor (Acute aquatic toxicity): 100 M-Factor (Chronic	>= 2,5 - < 10
		aquatic toxicity): 100	
metsulfuron-methyl (ISO)	74223-64-6 613-139-00-2	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 2,5 - < 10
		M-Factor (Acute aquatic toxicity): 1.000 M-Factor (Chronic aquatic toxicity): 1.000	

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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tribenuron-methyl (ISO)	101200-48-0 401-190-1 607-177-00-9	Skin Sens. 1; H317 STOT RE 2; H373 (Thyroid, Nervous system) Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 2,5 - < 10
		M-Factor (Acute aquatic toxicity): 100 M-Factor (Chronic aquatic toxicity): 100	
Lignosulfonic acid, sodium salt, sulfomethylated	68512-34-5	Eye Irrit. 2; H319	>= 1 - < 10
sodium carbonate	497-19-8 207-838-8 011-005-00-2	Eye Irrit. 2; H319	>= 1 - < 10
Phosphoric acid, trisodium salt, dodecahydrate	10101-89-0	Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 (Respiratory system) Acute toxicity esti-	>= 1 - < 10
		mate Acute inhalation toxicity (dust/mist): 0,830083 mg/l	
sodium dodecyl sulphate	151-21-3 205-788-1	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 3; H412 Acute toxicity esti-	>= 1 - < 2,5
Subatanaga with a warkalaga area	ours limit.	mate Acute oral toxicity: 977 mg/kg	
Substances with a workplace expo			. 40 00
kaolin	1332-58-7 310-194-1		>= 10 - < 20

For explanation of abbreviations see section 16.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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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 : Remove to fresh air.

If unconscious, place in recovery position and seek medical

advice.

If experiencing any discomfort, immediately remove from exposure. Light cases: Keep person under surveillance. Get medical attention immediately if symptoms develop. Serious cases: Get medical attention immediately or call for an 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 immediately 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 eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

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

Do not induce vomiting without medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Risks : May cause an allergic skin reaction.

Causes serious eye 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.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Unsuitable extinguishing

media

Do not spread spilled material with high-pressure water

streams.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion prod: :

ucts

Thermal decomposition can lead to release of irritating gases

and vapours.
Nitrogen oxides (NOx)

Sulphur oxides

Carbon oxides

Oxides of phosphorus Fluorinated compounds

5.3 Advice for firefighters

Special protective equipment :

for firefighters

Wear self-contained breathing apparatus for firefighting if nec-

essary.

Further information : Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

Avoid dust formation. Avoid breathing dust.

If it can be safely done, stop the leak.

Keep people away from and upwind of spill/leak.

Remove all sources of ignition.

Immediately evacuate personnel to safe areas.

Ensure adequate ventilation.

Never return spills in original containers for re-use.

Mark the contaminated area with signs and prevent access to

unauthorized personnel.

Only qualified personnel equipped with suitable protective

equipment may intervene.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of respirable particles.

Do not breathe vapours/dust.

Avoid exposure - obtain special instructions before use.

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

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

plication area.

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

regulations.

Persons susceptible to 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

Avoid dust formation. Provide appropriate exhaust ventilation

at places where dust is formed.

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

Wash hands before breaks and at the end of workday. Remove and wash contaminated clothing and gloves, including

the inside, before re-use.

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 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 available.

Further information on stor-

age stability

No decomposition if stored and applied as directed.

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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	Control parameters	Basis
		of exposure)		
kaolin	1332-58-7	TWA (Respira-	3 mg/m3	BG OEL
		ble)		
		TWA (Inhalable)	6 mg/m3	BG OEL
		TWA (Respirable	0,1 mg/m3	2004/37/EC
		dust)		
	Further information: Carcinogens or mutagens			
titanium dioxide	13463-67-7	TWA (respirable	10 mg/m3	BG OEL
		dust fraction)		

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

Substance name	End Use	Exposure routes	Potential health effects	Value
florasulam (ISO)			Systemic effects	0,05 mg/kg bw/day
sodium carbonate	Workers	Inhalation	Long-term local ef- fects	10 mg/m3
	Consumers	Inhalation	Acute local effects	10 mg/m3
Phosphoric acid, trisodium salt, dodec- ahydrate	Workers	Inhalation	Long-term systemic effects	4,07 mg/m3
	Consumers	Inhalation	Long-term systemic effects	3,04 mg/m3
sodium dodecyl sul- phate	Workers	Inhalation	Long-term systemic effects	285 mg/m3
	Workers	Dermal	Long-term systemic effects	4060 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	85 mg/m3
	Consumers	Dermal	Long-term systemic effects	2440 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	24 mg/kg bw/day

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

Substance name	Environmental Compartment	Value
florasulam (ISO)	Fresh water	0,000062 mg/l
Phosphoric acid, trisodium salt,	Sewage treatment plant	50 mg/l
dodecahydrate		

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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sodium dodecyl sulphate	Fresh water	0,176 mg/l
	Marine water	0,018 mg/l
	Sewage treatment plant	1,35 mg/l
	Fresh water sediment	6,97 mg/kg
	Marine sediment	0,697 mg/kg dry
		weight (d.w.)
	Soil	1,29 mg/kg dry
		weight (d.w.)

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 concentration 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

In case of dust exposure wear suitable personal respiratory

protection and protective suit.

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

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Form : granules

Colour : light brown

Odour : mild

Odour Threshold : not determined

Melting point/freezing point : not determined

Boiling point/boiling range : Decomposition

Flammability : Not highly flammable

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 : 6,5 - 7

Concentration: 1 % (1% solution in water)

Viscosity

Viscosity, dynamic : Not applicable

Viscosity, kinematic : not determined

Solubility(ies)

Water solubility : Miscible

Partition coefficient: n-

octanol/water

: Not available for this mixture.

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Vapour pressure : Not available for this mixture.

Relative density : Not available for this mixture.

Density : not determined

Relative vapour density : not determined

Particle characteristics

Particle size : No data available

Particle Size Distribution : No data available

Shape : No data available

9.2 Other information

Explosives : Not explosive

Oxidizing properties : The product is not oxidizing.

Self-ignition : not determined

Evaporation rate : Not applicable

Minimum ignition energy : 10 - 20 mJ

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.

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Dust may form explosive mixture in air.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

Protect from frost, heat and sunlight.

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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Not classified based on available information.

Product:

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

Method: Acute toxicity estimate Remarks: (Data on the product itself) Information source: Internal study report

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

Exposure time: 4 h

Test atmosphere: dust/mist Method: Acute toxicity estimate Remarks: (Data on the product itself) Information source: Internal study report

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

Method: Acute toxicity estimate Remarks: (Data on the product itself) Information source: Internal study report

Components:

florasulam (ISO):

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

Method: OECD Test Guideline 425

Acute inhalation toxicity : LC50 (Rat, male and female): > 5,09 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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

Method: OECD Test Guideline 402

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

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

tribenuron-methyl (ISO):

Acute oral toxicity : LD50: > 5.000 mg/kg

Method: OECD Test Guideline 425

Acute inhalation toxicity : LC50 (Rat): > 5,14 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

Lignosulfonic acid, sodium salt, sulfomethylated:

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

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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

Phosphoric acid, trisodium salt, dodecahydrate:

Acute oral toxicity : LD50 (Rat, female): > 2.000 mg/kg

Method: OECD Test Guideline 420

Remarks: no mortality

Acute inhalation toxicity : LC50 (Rat, male and female): > 0,83 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Remarks: Based on data from similar materials

no mortality

Acute toxicity estimate: 0,830083 mg/l

Test atmosphere: dust/mist Method: Calculation method

Assessment: The substance or mixture has no acute inhala-

tion toxicity

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

Method: OECD Test Guideline 402

Remarks: Based on data from similar materials

no mortality

sodium dodecyl sulphate:

Acute oral toxicity : LD50 (Rat, male and female): 1.200 mg/kg

Method: OECD Test Guideline 401

LD50 (Rat, male): 1.427 mg/kg Method: OECD Test Guideline 401

LD50 (Rat, female): 977 mg/kg Method: OECD Test Guideline 401

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

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: Based on data from similar materials

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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kaolin:

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

Method: OECD Test Guideline 401

LD50: > 2.000 mg/kg

Method: OECD Test Guideline 420

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

icity

Acute inhalation toxicity : LD50: 5,07 mg/l

Method: OECD Test Guideline 436

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

LD50: > 2.000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Skin corrosion/irritation

Not classified based on available information.

Product:

Species : Rat

Result : No skin irritation

Remarks : The toxicological data has been taken from products of similar

composition.

Information source: Internal study report

Components:

florasulam (ISO):

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

tribenuron-methyl (ISO):

Species : Rabbit

Assessment : Not classified as irritant
Method : OECD Test Guideline 404
Remarks : May cause mild irritation.

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

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Lignosulfonic acid, sodium salt, sulfomethylated:

Result : No skin irritation

sodium carbonate:

Species : Rabbit Exposure time : 4 h

Method : OECD Test Guideline 404

Result : No skin irritation

Phosphoric acid, trisodium salt, dodecahydrate:

Species : Rabbit Result : Skin irritation

sodium dodecyl sulphate:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Skin irritation

kaolin:

Method : OECD Test Guideline 404

Result : No skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Species : Rabbit

Result : Moderate eye irritation

Remarks : The toxicological data has been taken from products of similar

composition.

Information source: Data provided by an external source.

Components:

florasulam (ISO):

Method : OECD Test Guideline 405

Result : No eye irritation

metsulfuron-methyl (ISO):

Species : Rabbit

Method : OECD Test Guideline 405

Result : No eye irritation

tribenuron-methyl (ISO):

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

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Remarks : May cause mild irritation.

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

Lignosulfonic acid, sodium salt, sulfomethylated:

Result : Eye irritation

sodium carbonate:

Species : Rabbit

Result : Irritation to eyes, reversing within 21 days

Phosphoric acid, trisodium salt, dodecahydrate:

Species : Rabbit

Method : EPA OTS 798.4500

Result : Irritation to eyes, reversing within 21 days

sodium dodecyl sulphate:

Species : Rabbit

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

kaolin:

Method : OECD Test Guideline 405

Result : No eye irritation

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified based on available information.

Product:

Species : Guinea pig

Assessment : May cause sensitisation by skin contact.

Result : Causes sensitisation.

Remarks : The toxicological data has been taken from products of similar

composition.

Information source: Internal study report

Components:

florasulam (ISO):

Method : OECD Test Guideline 429

Result : Does not cause skin sensitisation.

metsulfuron-methyl (ISO):

Test Type : Maximisation Test

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Exposure routes : Skin contact Species : Guinea pig

Method : US EPA Test Guideline OPPTS 870.2600

Result : Not a skin sensitizer.

tribenuron-methyl (ISO):

Test Type : Maximisation Test

Species : Guinea pig

Assessment : May cause sensitisation by skin contact.

Method : OECD Test Guideline 406 Result : Causes skin sensitization.

Lignosulfonic acid, sodium salt, sulfomethylated:

Species : Guinea pig

Result : Not a skin sensitizer.

Phosphoric acid, trisodium salt, dodecahydrate:

Test Type : Local lymph node assay (LLNA)

Species : Mouse

Method : OECD Test Guideline 429

Result : Does not cause skin sensitisation.
Remarks : Based on data from similar materials

sodium dodecyl sulphate:

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

Result : Does not cause skin sensitisation.
Remarks : Based on data from similar materials

kaolin:

Method : OECD Test Guideline 429

Result : Does not cause skin sensitisation.

Germ cell mutagenicity

Not classified based on available information.

Product:

Germ cell mutagenicity- As-

sessment

: Contains no ingredient listed as a mutagen

Components:

florasulam (ISO):

Genotoxicity in vitro : Test system: Chinese hamster ovary cells

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

Result: negative

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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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

tribenuron-methyl (ISO):

Germ cell mutagenicity- As-

sessment

Did not show mutagenic effects in animal experiments.

Lignosulfonic acid, sodium salt, sulfomethylated:

Genotoxicity in vitro : Test Type: reverse mutation assay

Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Remarks: No data available

sodium 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.

Phosphoric acid, trisodium salt, dodecahydrate:

Genotoxicity in vitro : Test Type: gene mutation test

Method: OECD Test Guideline 490

Result: negative

Remarks: Based on data from similar materials

Test Type: Micronucleus test Method: OECD Test Guideline 487

Result: negative

Germ cell mutagenicity- As-

sessment

In vitro tests did not show mutagenic effects

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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sodium dodecyl sulphate:

Genotoxicity in vitro : Test Type: reverse mutation assay

Test system: Escherichia coli Method: OECD Test Guideline 471

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Result: negative

Genotoxicity in vivo : Test Type: chromosome aberration assay

Species: Mouse (male and female)

Application Route: Oral Result: negative

kaolin:

Genotoxicity in vitro : Test Type: Ames test

Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Remarks: No data available

Carcinogenicity

Not classified based on available information.

Product:

Carcinogenicity - Assess-

ment

: Contains no ingredient listed as a carcinogen

Components:

florasulam (ISO):

Carcinogenicity - Assess-

ment

Animal testing did not show any carcinogenic effects.

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

tribenuron-methyl (ISO):

Remarks : No significant adverse effects were reported

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Carcinogenicity - Assess-

ment

Did not show carcinogenic effects in animal experiments.

Lignosulfonic acid, sodium salt, sulfomethylated:

Remarks : No data available

sodium dodecyl sulphate:

Species : Rat
Application Route : Oral
Exposure time : 2 Years
NOAEL : 1.125
LOAEL : > 1.125
Result : negative

Reproductive toxicity

Not classified based on available information.

Product:

Reproductive toxicity - As-

sessment

Contains no ingredient listed as toxic to reproduction

Components:

florasulam (ISO):

Reproductive toxicity - As-

sessment

No evidence of adverse effects on sexual function and fertility,

or on development, based on animal experiments.

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

tribenuron-methyl (ISO):

Reproductive toxicity - As-

sessment

No toxicity to reproduction

Animal testing did not show any effects on foetal development., Did not show teratogenic effects in animal experiments.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Lignosulfonic acid, sodium salt, sulfomethylated:

Effects on fertility : Remarks: No data available

Effects on foetal develop-

ment

Remarks: No data available

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

Phosphoric acid, trisodium salt, dodecahydrate:

Effects on fertility : Species: Rat, male and female

Application Route: Oral Dose: 1000 mg/kg bw/day

General Toxicity - Parent: NOAEL: 1.000 mg/kg bw/day General Toxicity F1: NOAEL: 1.000 mg/kg bw/day

Method: OECD Test Guideline 422

Result: negative

Remarks: Based on data from similar materials

Effects on foetal develop-

ment

Test Type: reproductive and developmental toxicity study

Species: Rat

Application Route: Oral

Dose: 4.1, 19, 88.3, 410 mg/kg bw/day Duration of Single Treatment: 20 d

General Toxicity Maternal: NOAEL: > 410 mg/kg bw/day Embryo-foetal toxicity: NOAEL: > 410 mg/kg bw/day

Result: negative

Remarks: Based on data from similar materials

Reproductive toxicity - As-

sessment

Weight of evidence does not support classification for repro-

ductive toxicity

sodium dodecyl sulphate:

Effects on fertility : Test Type: Two-generation study

Species: Rat

Application Route: Oral

General Toxicity - Parent: NOAEL: 300 mg/kg body weight General Toxicity F1: NOAEL: 300 mg/kg body weight

Result: negative

Remarks: Based on data from similar materials

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Effects on foetal develop-

ment

: Test Type: Embryo-foetal development

Species: Rat

Application Route: Oral

Duration of Single Treatment: 6 - 15 d

General Toxicity Maternal: NOEL: 250 mg/kg body weight Developmental Toxicity: NOEL: 250 mg/kg body weight

Result: negative

Remarks: Based on data from similar materials

kaolin:

Effects on fertility : Remarks: No data available

Effects on foetal develop-

ment

Remarks: No data available

STOT - single exposure

Not classified based on available information.

Product:

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

organ toxicant, single exposure.

Components:

florasulam (ISO):

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

organ toxicant, single exposure.

tribenuron-methyl (ISO):

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

organ toxicant, single exposure.

Lignosulfonic acid, sodium salt, sulfomethylated:

Remarks : No data available

Phosphoric acid, trisodium salt, dodecahydrate:

Assessment : May cause respiratory irritation.

kaolin:

Remarks : No significant adverse effects were reported

STOT - repeated exposure

Not classified based on available information.

Product:

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

organ toxicant, repeated exposure.

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Components:

florasulam (ISO):

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

organ toxicant, repeated exposure.

tribenuron-methyl (ISO):

Target Organs : Thyroid, Nervous system

Assessment : May cause damage to organs through prolonged or repeated

exposure.

Lignosulfonic acid, sodium salt, sulfomethylated:

Remarks : No data available

sodium carbonate:

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

organ toxicant, repeated exposure.

sodium dodecyl sulphate:

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

organ toxicant, repeated exposure.

kaolin:

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

organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

florasulam (ISO):

Species : Rat

LOAEL : 500 mg/kg
Exposure time : 90 day
Symptoms : kidney effects

metsulfuron-methyl (ISO):

Species : Rat, male and female

NOEL : 1000 ppm Application Route : Oral - feed Exposure time : 90 days

Symptoms : Reduced body weight

tribenuron-methyl (ISO):

Species : Rabbit LOAEL : 80 mg/kg

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Target Organs : Thyroid, Nervous system

Assessment : The substance or mixture is classified as specific target organ

toxicant, repeated exposure, category 2.

Remarks : Increased mortality or reduced survival

sodium carbonate:

Species : Rat, male and female

NOAEL : > 0.01 mg/kg

Application Route : inhalation (dust/mist/fume)

Test atmosphere : dust/mist

Phosphoric acid, trisodium salt, dodecahydrate:

Species : Dog, female

NOAEL : 492.77 mg/kg bw/day LOAEL : 1433.56 mg/kg bw/day

Application Route : Oral - feed

Exposure time : 90 d

Dose : 129.31, 492.77, 1433.56 mg/kg bw/day

Target Organs : Kidney

Remarks : Based on data from similar materials

Species : Dog, male

NOAEL : 322.88 mg/kg bw/day LOAEL : 1107.12 mg/kg bw/day

Application Route : Oral - feed

Exposure time : 90 d

Dose : 94.23, 322.88, 1107.12 mg/kg bw/day

Target Organs : Kidney

Remarks : Based on data from similar materials

sodium dodecyl sulphate:

Species : Rat
NOAEL : 488 mg/kg
LOAEL : 1.016 mg/kg
Application Route : Oral - feed
Exposure time : 13 weeks

kaolin:

Remarks : No data available

Aspiration toxicity

Not classified based on available information.

Product:

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

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Components:

florasulam (ISO):

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

tribenuron-methyl (ISO):

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

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 : No data available

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to algae/aquatic

plants

: ErC50 (Pseudokirchneriella subcapitata (microalgae)): 0,261

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Information source: Internal study report

(Data on the product itself)

ErC50 (Lemna gibba (duckweed)): 0,00317 mg/l

Exposure time: 7 d

Method: OECD Test Guideline 221

Remarks: Information source: Internal study report

(Data on the product itself)

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Components:

florasulam (ISO):

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

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 292 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)):

0,00894 mg/l

Exposure time: 72 h

EC50 (Lemna gibba (gibbous duckweed)): 0,00118 mg/l

Exposure time: 72 h

M-Factor (Acute aquatic tox-

icity)

100

Toxicity to fish (Chronic tox-

icity)

NOEC: 119 mg/l

Exposure time: 28 d

Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC: 38,9 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

M-Factor (Chronic aquatic

toxicity)

100

Toxicity to soil dwelling or-

ganisms

LC50: > 1.320 mg/kg

Species: Eisenia fetida (earthworms)

Toxicity to terrestrial organ-

isms

LD50: > 5.000 mg/kg

End point: Acute contact toxicity

Species: Anas platyrhynchos (Mallard duck)

LD50: >100

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

LD50: >100

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

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

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according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Method: OECD Test Guideline 202

EC50 (Daphnia magna (Water flea)): 43,1 mg/l

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

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 : 1.000

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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toxicity)

Toxicity to soil dwelling or-

ganisms

NOEC: 6 mg/kg Exposure time: 56 d

Species: Eisenia fetida (earthworms)

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: $> 50 \mu g/bee$

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

tribenuron-methyl (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 738 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Crustaceans): > 320 mg/l

Exposure time: 48 h

EC50 (Daphnia magna (Water flea)): > 894 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic : ErC50 (Raphidocelis subcapitata (freshwater green alga)):

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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plants 0,068 mg/l

Exposure time: 72 h

ErC50 (Lemna gibba (duckweed)): 0,0047 mg/l

Exposure time: 7 d

NOEC (Lemna gibba (duckweed)): 0,001 mg/l

Exposure time: 7 d

M-Factor (Acute aquatic tox-

icity)

100

Toxicity to fish (Chronic tox-

icity)

NOEC: 114 mg/l

Exposure time: 21 d

Species: Cyprinodon variegatus (sheepshead minnow)

Method: OECD Test Guideline 211

NOEC: 560 mg/l Exposure time: 21 d

Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 41 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

M-Factor (Chronic aquatic

toxicity)

100

Toxicity to soil dwelling or-

ganisms

NOEC: 3,2 mg/kg

Exposure time: 56 d

Species: Eisenia fetida (earthworms)

Toxicity to terrestrial organ-

isms

LD50: > 2.250 mg/kg

Species: Colinus virginianus (Bobwhite quail)

LD50: > 5.620 ppm

Species: Colinus virginianus (Bobwhite quail)

Remarks: Dietary

LD50: > 5.620 ppm

Species: Anas platyrhynchos (Mallard duck)

Remarks: Dietary

LD50: > 98.4 µg/bee Exposure time: 48 h

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

LD50: > 9.1 µg/bee Exposure time: 48 h

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

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

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

Lignosulfonic acid, sodium salt, sulfomethylated:

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

Exposure time: 96 h

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

Phosphoric acid, trisodium salt, dodecahydrate:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 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

Toxicity to algae/aquatic

plants

EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l

Exposure time: 72 h Method: EU Method C3

Remarks: Based on data from similar materials

NOEC (Desmodesmus subspicatus (green algae)): > 100 mg/l

Exposure time: 72 h Method: EU Method C3

Remarks: Based on data from similar materials

Toxicity to microorganisms : EC50 (activated sludge): 1.000 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Remarks: Based on data from similar materials

NOEC (activated sludge): 1.000 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Remarks: Based on data from similar materials

Toxicity to soil dwelling or-

ganisms

LC50: > 3.500 mg/kg Exposure time: 14 d

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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

Remarks: Based on data from similar materials

sodium dodecyl sulphate:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 29 mg/l

Exposure time: 96 h

Test Type: flow-through test

Method: OECD Test Guideline 203

LC50 (Fish): 3,6 mg/l Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

LC50 (Ceriodaphnia dubia (water flea)): 5,55 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Desmodesmus subspicatus (green algae)): 53 mg/l

Exposure time: 72 h Test Type: static test

NOEC (Desmodesmus subspicatus (green algae)): 30 mg/l

Exposure time: 72 h Test Type: static test

Toxicity to microorganisms : EC50 (activated sludge): 135 mg/l

Exposure time: 3 h

Test Type: Respiration inhibition

Toxicity to fish (Chronic tox-

icity)

NOEC: > 1,357 mg/l

Exposure time: 42 d

Species: Pimephales promelas (fathead minnow)

Test Type: flow-through test Method: No data available

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 0,88 mg/l Exposure time: 7 d

Species: Ceriodaphnia dubia (water flea)

Test Type: flow-through test

kaolin:

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

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 1.000 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

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

100 mg/l

Exposure time: 72 h

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Method: OECD Test Guideline 201

Toxicity to microorganisms

Remarks: No data available

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

Remarks: No data available

12.2 Persistence and degradability

Product:

Biodegradability : Result: Not readily biodegradable.

Remarks: Estimation based on data obtained on active ingre-

dient.

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

treatment plants.

Components:

florasulam (ISO):

Biodegradability : Result: Not readily biodegradable.

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.

tribenuron-methyl (ISO):

Biodegradability : Result: Not readily biodegradable.

Remarks: The product/substance is not persistent in the envi-

ronment.

Primary degradation half-lives vary with circumstances, from a

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

Metabolites are considered as persistent.

According to the results of tests of biodegradability this prod-

uct is not readily biodegradable.

Lignosulfonic acid, sodium salt, sulfomethylated:

Biodegradability : Result: Not readily biodegradable.

Biodegradation: < 5 % Exposure time: 28 d

Method: OECD Test Guideline 301E

sodium carbonate:

Biodegradability : Remarks: The methods for determining biodegradability are

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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not applicable to inorganic substances.

sodium dodecyl sulphate:

Biodegradability : Test Type: aerobic

Inoculum: activated sludge, non-adapted

Concentration: 20 mg/l Result: Readily biodegradable.

Biodegradation: 95 % Exposure time: 28 d

Method: OECD Test Guideline 301B

kaolin:

Biodegradability : Remarks: The methods for determining biodegradability are

not applicable to inorganic substances.

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Does not bioaccumulate.

Estimation based on data obtained on active ingredient.

Components:

florasulam (ISO):

Bioaccumulation : Bioconcentration factor (BCF): < 2,21

Remarks: Does not bioaccumulate.

Partition coefficient: n-

octanol/water

log Pow: 1 (20 °C)

pH: 4

log Pow: -1,22 (20 °C)

pH: 7

log Pow: -2,06 (20 °C)

pH: 10

metsulfuron-methyl (ISO):

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)

Exposure time: 28 d

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

Partition coefficient: n-

octanol/water

Pow: 0,018 (25 °C) log Pow: -1,7 (25 °C)

pH: 7

tribenuron-methyl (ISO):

Bioaccumulation : Bioconcentration factor (BCF): < 1

Remarks: Does not bioaccumulate.

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Partition coefficient: n-

octanol/water

log Pow: -0,38

Lignosulfonic acid, sodium salt, sulfomethylated:

Bioaccumulation : Remarks: Low potential for bioaccumulation

Partition coefficient: n-

octanol/water

log Pow: -3,45

sodium carbonate:

Bioaccumulation : Remarks: Does not bioaccumulate.

sodium dodecyl sulphate:

Partition coefficient: n-

octanol/water

log Pow: -2,03 (20 °C)

kaolin:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-

octanol/water

Remarks: Not applicable

12.4 Mobility in soil

Components:

florasulam (ISO):

Distribution among environ-

mental compartments

Koc: 22 ml/g, log Koc: 1,34

Remarks: Highly mobile in soils

Stability in soil

tribenuron-methyl (ISO):

Distribution among environmental compartments Remarks: Under normal conditions the active ingredient/s is/are of high to intermediate mobility in soil. There is a poten-

tial for leaching to groundwater.

kaolin:

Distribution among environ-

mental compartments

Remarks: Low mobility in soil

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered

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

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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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

See product label for additional application instructions relat-

ing to environmental precautions.

No other ecological effects to be specially mentioned.

An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Very toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

courses or the soil.

Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.

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

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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14.2 UN proper shipping name

ADN : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Metsulfuron-methyl, Tribenuron-methyl, Florasulam)

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Metsulfuron-methyl, Tribenuron-methyl, Florasulam)

RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Metsulfuron-methyl, Tribenuron-methyl, Florasulam)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Metsulfuron-methyl, Tribenuron-methyl, Florasulam)

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

(Metsulfuron-methyl, Tribenuron-methyl, Florasulam)

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
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

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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IATA (Cargo)

Packing instruction (cargo : 956

aircraft)

Packing instruction (LQ) : Y956 Packing group : III

Labels : Miscellaneous

IATA (Passenger)

Packing instruction (passen: 956

ger aircraft)

Packing instruction (LQ) : Y956
Packing group : III

Labels : Miscellaneous

14.5 Environmental hazards

ADN

Environmentally hazardous : yes

ADR

Environmentally hazardous : yes

RID

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

IATA (Passenger)

Environmentally hazardous : yes

IATA (Cargo)

Environmentally hazardous : yes

14.6 Special precautions for user

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

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) : Conditions of restriction for the following entries should be considered: Number on list 75

If you intend to use this product as tattoo ink, please contact your vendor.

dor.

REACH - Candidate List of Substances of Very High : Not applicable

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Concern for Authorisation (Article 59).

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

plete the ozone layer

tants (recast)

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

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

of dangerous chemicals

Not applicable

Not applicable

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 ENVIRONMENTAL HAZARDS

Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

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.

TBM 500 SG

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

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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

H302 : Harmful if swallowed. H315 : Causes skin irritation.

H317
H318
Causes serious eye damage.
H319
Causes serious eye irritation.
H335
May cause respiratory irritation.

H373 : May cause damage to organs through prolonged or repeated

exposure.

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

Acute Tox. : Acute toxicity

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

Eye Dam. : Serious eye damage

Eye Irrit. : Eye irritation
Skin Irrit. : Skin irritation
Skin Sens. : Skin sensitisation

STOT RE : Specific target organ toxicity - repeated exposure STOT SE : Specific target organ toxicity - single exposure

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

from the risks related to exposure to carcinogens or mutagens

at work

BG OEL : Bulgaria. Ordinance on the Protection of Workers from Risks

related to Exposure to Chemical Agents at Work.

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

BG OEL / TWA : 8-hr Limit

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

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tional 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

Classification of the mixture:	Classification procedure:

Skin Sens. 1	H317	Based on product data or assessment
Eye Irrit. 2	H319	Based on product data or assessment
Aquatic Acute 1	H400	Based on product data or assessment
		~

Aquatic Chronic 1 H410 Calculation method

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