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



FLORASULAM 50 g/I SC

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

1.0 08.10.2024 50001289 Date of first issue: 08.10.2024

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

1.1 Product identifier

Product name FLORASULAM 50 g/I SC

Other means of identification

Product code 50001289

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

Use of the Sub- : Herbicide

stance/Mixture

Recommended restrictions: Use as recommended by the label.

on use For professional users only.

1.3 Manufacturer or supplier's details

<u>Supplier Address</u> 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 .

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

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



FLORASULAM 50 g/I SC

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

1.0 08.10.2024 50001289 Date of first issue: 08.10.2024

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 : 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 as hazardous waste in

accordance with local regulations.

Additional Labelling

EUH208 Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

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.

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



FLORASULAM 50 g/I SC

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

1.0 08.10.2024 50001289 Date of first issue: 08.10.2024

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No.	Classification	Concentration (% w/w)
	Index-No.		(70 W/W)
	Registration number		
florasulam (ISO)	145701-23-1 613-230-00-7	Aquatic Acute 1; H400 Aquatic Chronic 1;	>= 2,5 - < 10
		H410	
		M-Factor (Acute aquatic toxicity): 100	
		M-Factor (Chronic aquatic toxicity): 100	
1,2-benzisothiazol-3(2H)-one	2634-33-5 220-120-9 613-088-00-6	Acute Tox. 2; H330 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1 specific concentration limit	>= 0,0025 - < 0,025
		Skin Sens. 1A; H317 >= 0,036 %	
		Acute toxicity esti- mate	
		Acute oral toxicity: 450 mg/kg Acute inhalation tox- icity (dust/mist): 0,21 mg/l	

For explanation of abbreviations see section 16.

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



FLORASULAM 50 g/I SC

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

1.0 08.10.2024 50001289 Date of first issue: 08.10.2024

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 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 : 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.

Immediate medical attention is required in case of ingestion.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Dry chemical, CO2, water spray or regular foam.

Unsuitable extinguishing

media

: High volume water jet

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



FLORASULAM 50 g/I SC

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

1.0 08.10.2024 50001289 Date of first issue: 08.10.2024

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

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

courses.

Hazardous combustion prod: :

ucts

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

Carbon oxides

Nitrogen oxides (NOx)

Sulphur oxides Hydrogen cyanide Hydrogen fluoride Fluorine 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.

If it can be safely done, stop the leak.

Immediately evacuate personnel to safe areas.

Remove all sources of ignition. Ensure adequate ventilation.

Never return spills in original containers for re-use.

Mark the contaminated area with signs and prevent access to

unauthorized personnel.

Only qualified personnel equipped with suitable protective

equipment may intervene.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

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

5/23

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



FLORASULAM 50 g/I SC

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

1.0 08.10.2024 50001289 Date of first issue: 08.10.2024

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

Normal measures for preventive fire protection.

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 conditions

The product is stable under normal conditions of warehouse storage. Store in closed, labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A hand wash station should be availa-

ble.

Further information on stor-

age stability

No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : Registered pesticide to be used in accordance with a label

approved by country-specific regulatory authorities.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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
florasulam (ISO)			Systemic effects	0,05 mg/kg

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



FLORASULAM 50 g/I SC

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

1.0 08.10.2024 50001289 Date of first issue: 08.10.2024

				bw/day
1,2-benzisothiazol- 3(2H)-one	Workers	Inhalation	Long-term systemic effects	6,81 mg/m3
	Workers	Dermal	Long-term systemic effects	0,966 mg/kg
	Consumers	Inhalation	Long-term systemic effects	1,2 mg/m3
	Consumers	Dermal	Long-term systemic effects	0,345 mg/kg

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
1,2-benzisothiazol-3(2H)-one	Fresh water	0,00403 mg/l
	Marine water	0,000403 mg/l
	Sewage treatment plant	1,03 mg/l
	Fresh water sediment	0,0499 mg/l
	Marine sediment	0,00499 mg/l

8.2 Exposure controls

Personal protective equipment

Eye/face protection : Eye wash bottle with pure water

Tightly fitting safety goggles

Hand protection

Material : Wear chemical resistant gloves, such as barrier laminate,

butyl rubber or nitrile rubber.

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Skin and body protection : Impervious clothing

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

Respiratory protection : In case of mist, spray or aerosol exposure wear suitable per-

sonal respiratory protection and protective suit.

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

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

structions.

Wear suitable protective equipment. When using do not eat, drink or smoke.

In the context of professional plant protection use as recommended, the end user must refer to the label and the instruc-

tions for use.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

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



FLORASULAM 50 g/I SC

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

1.0 08.10.2024 50001289 Date of first issue: 08.10.2024

Physical state : liquid

Colour : opaque, white Odour : hydrocarbon-like

Melting point/freezing point : < 0 °C

Boiling point/boiling range : No data available Upper explosion limit / Upper : No data available

flammability limit

Lower explosion limit / Lower

flammability limit

Flash point : Method: closed cup

None. The flame is extinguished at 66°C.

: No data available

Auto-ignition temperature : > 600 °C

Decomposition temperature : No data available

pH : 4,4 (25 °C)

Concentration: 1 %

Viscosity

Viscosity, dynamic : 1.048 mPa.s (20 °C) 897 mPa.s (40 °C)

Solubility(ies)

Solubility in other solvents : No data available

Partition coefficient: n- : Not available for this mixture.

octanol/water

Vapour pressure : Not available for this mixture.

Relative density : 1,040

Relative vapour density : No data available

Particle characteristics

Particle size : Not applicable

9.2 Other information

Explosives : Not explosive
Oxidizing properties : Non-oxidizing
Flammability (liquids) : No data available
Miscibility with water : emulsifiable

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.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

Heating of the product will produce harmful and irritant va-

pours.

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



FLORASULAM 50 g/I SC

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

1.0 08.10.2024 50001289 Date of first issue: 08.10.2024

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

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

Product:

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

Method: OECD Test Guideline 425

Acute inhalation toxicity : LD50 (Rat): > 5,07 mg/l

Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 402

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

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

Method: OECD Test Guideline 402

1,2-benzisothiazol-3(2H)-one:

Acute oral toxicity : LD50 (Rat, male and female): 490 mg/kg

Method: OECD Test Guideline 401

Acute toxicity estimate: 450 mg/kg

Method: Acute toxicity estimate according to Regulation (EC)

No. 1272/2008

Remarks: Based on EU Harmonised classification - Annex VI

of Regulation (EC) No 1272/2008 (CLP Regulation)

Acute inhalation toxicity : Acute toxicity estimate: 0,21 mg/l

Test atmosphere: dust/mist

Method: Acute toxicity estimate according to Regulation (EC)

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



FLORASULAM 50 g/I SC

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

1.0 08.10.2024 50001289 Date of first issue: 08.10.2024

No. 1272/2008

Remarks: Based on EU Harmonised classification - Annex VI

of Regulation (EC) No 1272/2008 (CLP Regulation)

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

Skin corrosion/irritation

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

Product:

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

Components:

florasulam (ISO):

Method : OECD Test Guideline 404

Result : No skin irritation

1,2-benzisothiazol-3(2H)-one:

Species : Rabbit Exposure time : 72 h

Method : OECD Test Guideline 404

Result : No skin irritation

Serious eye damage/eye irritation

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

Product:

Species : Rabbit

Method : OECD Test Guideline 405

Result : No eye irritation

Components:

florasulam (ISO):

Method : OECD Test Guideline 405

Result : No eye irritation

1,2-benzisothiazol-3(2H)-one:

Species : Bovine cornea

Method : OECD Test Guideline 437

Result : No eye irritation

Species : Rabbit

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



FLORASULAM 50 g/I SC

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

1.0 08.10.2024 50001289 Date of first issue: 08.10.2024

Method : EPA OPP 81-4

Result : Irreversible effects on the eye

Respiratory or skin sensitisation

Skin sensitisation

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

Respiratory sensitisation

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

Product:

Species : mice

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

Components:

florasulam (ISO):

Method : OECD Test Guideline 429
Result : Does not cause skin sensitisation.

1,2-benzisothiazol-3(2H)-one:

Test Type : Maximisation Test

Species : Guinea pig

Method : OECD Test Guideline 406

Result : May cause sensitisation by skin contact.

Species : Guinea pig Method : FIFRA 81.06

Result : May cause sensitisation by skin contact.

Germ cell mutagenicity

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

Components:

florasulam (ISO):

Genotoxicity in vitro : Test system: Chinese hamster ovary cells

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

Result: negative

1,2-benzisothiazol-3(2H)-one:

Genotoxicity in vitro : Test Type: gene mutation test

Test system: mouse lymphoma cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

Test Type: Ames test

Method: OECD Test Guideline 471

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



FLORASULAM 50 g/I SC

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

1.0 08.10.2024 50001289 Date of first issue: 08.10.2024

Result: negative

Test Type: Chromosome aberration test in vitro

Method: OECD Test Guideline 473

Result: positive

Genotoxicity in vivo : Test Type: unscheduled DNA synthesis assay

Species: Rat (male) Cell type: Liver cells

Application Route: Ingestion

Exposure time: 4 h

Method: OECD Test Guideline 486

Result: negative

Test Type: Micronucleus test

Species: Mouse Application Route: Oral

Method: OECD Test Guideline 474

Result: negative

Germ cell mutagenicity- As-

sessment

Weight of evidence does not support classification as a germ

cell mutagen.

Carcinogenicity

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

Components:

florasulam (ISO):

Carcinogenicity - Assess-

ment

: Animal testing did not show any carcinogenic effects.

Reproductive toxicity

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

Components:

florasulam (ISO):

Reproductive toxicity - As-

sessment

: No evidence of adverse effects on sexual function and fertility,

or on development, based on animal experiments.

1,2-benzisothiazol-3(2H)-one:

Effects on fertility : Species: Rat, male

Application Route: Ingestion

General Toxicity - Parent: NOAEL: 18,5 mg/kg body weight

General Toxicity F1: NOAEL: 48 mg/kg body weight

Fertility: NOAEL: 112 mg/kg bw/day

Symptoms: No effects on reproduction parameters

Method: OPPTS 870.3800

Result: negative

Reproductive toxicity - As- : Weight of evidence does not support classification for repro-

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



FLORASULAM 50 g/I SC

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

1.0 08.10.2024 50001289 Date of first issue: 08.10.2024

sessment ductive toxicity

STOT - single exposure

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

Components:

florasulam (ISO):

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

organ toxicant, single exposure.

STOT - repeated exposure

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

Components:

florasulam (ISO):

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

organ toxicant, repeated exposure.

1,2-benzisothiazol-3(2H)-one:

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

1,2-benzisothiazol-3(2H)-one:

Species : Rat, male and female

NOAEL : 15 mg/kg Application Route : Ingestion Exposure time : 28 d

Method : OECD Test Guideline 407

Symptoms : Irritation

Species : Rat, male and female

NOAEL : 69 mg/kg Application Route : Ingestion Exposure time : 90 d

Symptoms : Irritation, Reduced body weight

Aspiration toxicity

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

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



FLORASULAM 50 g/I SC

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

08.10.2024 50001289 Date of first issue: 08.10.2024 1.0

Components:

florasulam (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.

Further information

Product:

Remarks No data available

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)): > 2.100 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 2.100 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

ErC50 (Pseudokirchneriella subcapitata (green algae)): 5,6

mg/l

Exposure time: 72 h

ErC50 (Lemna minor (duckweed)): 0,055 mg/l

Exposure time: 7 d

Toxicity to soil dwelling or-

ganisms

LC50: > 1.000 mg/kgExposure time: 14 d

Species: Eisenia fetida (earthworms)

Toxicity to terrestrial organ-

isms

LD50: > 2100 µg/bee Exposure time: 48 h

End point: Acute contact toxicity

Species: Apis mellifera (bees)

LD50: > 1900 µg/bee Exposure time: 48 h

End point: Acute oral toxicity

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



FLORASULAM 50 g/I SC

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

1.0 08.10.2024 50001289 Date of first issue: 08.10.2024

Species: Apis mellifera (bees)

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Remarks: According to calculation method of Regulation (EC)

No 1272/2008.

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

Remarks: According to calculation method of Regulation (EC)

No 1272/2008.

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

ErC50 (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 µg/bee

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

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



FLORASULAM 50 g/I SC

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

1.0 08.10.2024 50001289 Date of first issue: 08.10.2024

LD50: > 100 µg/bee

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

1,2-benzisothiazol-3(2H)-one:

Toxicity to fish : LC50 (Cyprinodon variegatus (sheepshead minnow)): 16,7

mg/l

Exposure time: 96 h Test Type: static test

LC50 (Oncorhynchus mykiss (rainbow trout)): 2,15 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 2,9 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): 0,070

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 0,04

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

M-Factor (Acute aquatic tox-

icity)

1

Toxicity to microorganisms : EC50 (activated sludge): 24 mg/l

Exposure time: 3 h

Test Type: Respiration inhibition Method: OECD Test Guideline 209

EC50 (activated sludge): 12,8 mg/l

Exposure time: 3 h

Test Type: Respiration inhibition Method: OECD Test Guideline 209

M-Factor (Chronic aquatic

toxicity)

: 1

12.2 Persistence and degradability

Product:

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

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



FLORASULAM 50 g/I SC

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

1.0 08.10.2024 50001289 Date of first issue: 08.10.2024

Components:

florasulam (ISO):

Biodegradability Result: Not readily biodegradable.

1,2-benzisothiazol-3(2H)-one:

Biodegradability Result: rapidly biodegradable

Method: OECD Test Guideline 301C

12.3 Bioaccumulative potential

Product:

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

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

1,2-benzisothiazol-3(2H)-one:

Bioaccumulation Species: Lepomis macrochirus (Bluegill sunfish)

Exposure time: 56 d

Bioconcentration factor (BCF): 6,62 Method: OECD Test Guideline 305

Remarks: Substance is not persistent, bioaccumulative, and

toxic (PBT).

Partition coefficient: n-

octanol/water

log Pow: 0,7 (20 °C)

pH: 7

log Pow: 0,99 (20 °C)

pH: 5

12.4 Mobility in soil

Product:

mental compartments

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

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



FLORASULAM 50 g/I SC

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

1.0 08.10.2024 50001289 Date of first issue: 08.10.2024

Components:

florasulam (ISO):

Distribution among environmental compartments

Koc: 22 ml/g, log Koc: 1,34 Remarks: Highly mobile in soils

Stability in soil

1,2-benzisothiazol-3(2H)-one:

Distribution among environmental compartments

Koc: 9,33 ml/g, log Koc: 0,97 Method: OECD Test Guideline 121 Remarks: Highly mobile in soils

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered

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

0.1% or higher.

12.6 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.

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

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



FLORASULAM 50 g/I SC

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

1.0 08.10.2024 50001289 Date of first issue: 08.10.2024

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 3082
ADR : UN 3082
RID : UN 3082
IMDG : UN 3082
IATA : UN 3082

14.2 UN proper shipping name

ADN : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Florasulam)

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Florasulam)

RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Florasulam)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Florasulam)

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

(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 : M6
Hazard Identification Number : 90
Labels : 9

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



FLORASULAM 50 g/I SC

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

1.0 08.10.2024 50001289 Date of first issue: 08.10.2024

ADR

Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9
Tunnel restriction code : (-)

RID

Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9

IMDG

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

IATA (Cargo)

Packing instruction (cargo : 964

aircraft)

Packing instruction (LQ) : Y964
Packing group : III

Labels : Miscellaneous

IATA (Passenger)

Packing instruction (passen- : 964

ger aircraft)

Packing instruction (LQ) : Y964
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.

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



FLORASULAM 50 g/I SC

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

08.10.2024 50001289 Date of first issue: 08.10.2024 1.0

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, 3

If you intend to use this product as tattoo ink, please contact your ven-

dor.

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

Not applicable

Regulation (EC) on substances that deplete the ozone

layer

Not applicable

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

tants (recast)

Not applicable

Regulation (EU) 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.

ENVIRONMENTAL HAZARDS

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.

E1

florasulam (ISO)

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



FLORASULAM 50 g/I SC

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

1.0 08.10.2024 50001289 Date of first issue: 08.10.2024

mixture of polyorganosiloxanes and fillers

ENCS : Not in compliance with the inventory

ISHL : Not in compliance with the inventory

KECI : Not in compliance with the inventory

PICCS : Not in compliance with the inventory

IECSC : Not in compliance with the inventory

NZIoC : Not in compliance with the inventory

TECI: Not in compliance with the inventory

15.2 Chemical safety assessment

A chemical safety assessment is not required for this product (mixture).

SECTION 16: Other information

Full text of H-Statements

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

H317 : May cause an allergic skin reaction. H318 : Causes serious eye damage.

H330 : Fatal if inhaled.

H400 : Very toxic to aquatic life.

H410 : Very toxic 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

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

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

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



FLORASULAM 50 g/I SC

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

1.0 08.10.2024 50001289 Date of first issue: 08.10.2024

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:

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

Disclaimer

FMC Corporation believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. You can contact FMC Corporation to ensure that this document is the most current available from FMC Corporation. No warranty of fitness for any particular purpose, warranty of merchantability or any other warranty, expressed or implied, is made concerning the information provided herein. The information provided herein relates only to the specified product designated and may not be applicable where such product is used in combination with any other materials or in any process. The user is responsible for determining whether the product is fit for a particular purpose and suitable for the user's conditions and methods of use. Since the conditions and methods of use are beyond the control of FMC Corporation, FMC Corporation expressly disclaims any and all liability as to any results obtained or arising from any use of the products or reliance on such information.

Prepared by

FMC Corporation

FMC and the FMC Logo are trademarks of FMC Corporation and/or an affiliate.

© 2021-2024 FMC Corporation. All Rights Reserved.

DK / 6N