according to the Globally Harmonized System



## TRIBENURON-METHYL 600 g/kg + FLORASULAM 200 g/kg WG

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

11.10.2024 50000856 Date of first issue: 11.10.2024 1.0

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name TRIBENURON-METHYL 600 g/kg + FLORASULAM 200 g/kg

Manufacturer or supplier's details

Company : Cheminova India Limited

Address (27+28) B, GIDC ESTATE,

PANOLI - 394 116

DIST. - BHARUCH (GUJARAT)

India

Telephone : 02646-618500

E-mail address SDS-Info@fmc.com

022 6704 5504/5404 Emergency telephone

000-800-100-7141 (CHEMTREC)

Medical Emergency Number 022 6704 5504/5404

Recommended use of the chemical and restrictions on use

Recommended use Herbicide

Restrictions on use Use as recommended by the label.

#### 2. HAZARDS IDENTIFICATION

#### Manufacture, Storage and Import of Hazardous Chemicals Rules 1989

#### Classification

Not classified as hazardous according to criteria laid down in Part I of Schedule-1.

**GHS Classification** 

Acute toxicity (Oral) Category 5

Specific target organ toxicity - :

repeated exposure

Category 2

Short-term (acute) aquatic

hazard

Category 1

Long-term (chronic) aquatic

hazard

Category 1

according to the Globally Harmonized System



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**GHS** label elements

Hazard pictograms





Signal Word : WARNING

Hazard Statements : H303 May be harmful if swallowed.

H373 May cause damage to organs through prolonged or re-

peated exposure.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements : Previous

Prevention:

P260 Do not breathe dust.

P273 Avoid release to the environment.

Response:

P301 + P317 IF SWALLOWED: Get medical help.

P319 Get medical help if you feel unwell.

P391 Collect spillage.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

Other hazards which do not result in classification

None known.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

### Components

Chemical name	CAS-No.	Concentration (% w/w)
tribenuron-methyl (ISO)	101200-48-0	>= 50 - < 70
florasulam (ISO)	145701-23-1	>= 20 - < 25
sodium dimethylnaphthalenesulphonate	27178-87-6	>= 3 - < 10
Sodium alkylnaphthalenesulfonate formaldehyde condensate	68425-94-5	>= 2.5 - < 10
calcium carbonate	471-34-1	>= 1 - < 10

#### 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Show this material safety data sheet to the doctor in attend-

ance.

according to the Globally Harmonized System



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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 : 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 : Clean mouth with water and drink afterwards plenty of water.

Do not induce vomiting without medical advice.

Keep respiratory tract clear.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

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

Most important symptoms and effects, both acute and

delayed

Generally, sulphonylurea herbicides cause lethargy, confu-

sion, dizziness, seizures and coma on ingestion.

May be harmful if swallowed.

May cause damage to organs through prolonged or repeated

exposure.

Protection of first-aiders : First Aid responders should pay attention to self-protection

and use the recommended protective clothing

Avoid inhalation, ingestion and contact with skin and eyes. If potential for exposure exists refer to Section 8 for specific

personal protective equipment.

Notes to physician : Treat symptomatically.

Immediate medical attention is required in case of ingestion.

#### 5. FIRE-FIGHTING MEASURES

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

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

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Unsuitable extinguishing

media

High volume water jet

Do not spread spilled material with high-pressure water

streams.

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.

Nitrogen oxides (NOx)

Sulfur oxides Carbon oxides Hydrogen fluoride Fluorinated compounds

Specific extinguishing meth-

ods

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.

Special protective equipment :

for fire-fighters

Wear self-contained breathing apparatus for firefighting if nec-

essary.

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emer-

gency procedures

Use personal protective equipment.

Avoid dust formation. Avoid breathing dust.

Keep people away from and upwind of spill/leak.

Remove all sources of ignition.

Immediately evacuate personnel to safe areas.

Ensure adequate ventilation.

If it can be safely done, stop the leak.

Do not touch or walk through the spilled material. 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.

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.

Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

#### 7. HANDLING AND STORAGE

Advice on protection against : Avoid dust formation.

according to the Globally Harmonized System



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fire and explosion Provide appropriate exhaust ventilation at places where dust

is formed.

Advice on safe handling : Avoid formation of respirable particles.

Do not breathe vapors/dust.

Avoid exposure - obtain special instructions before use.

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

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

plication area.

Dispose of rinse water in accordance with local and national

regulations.

Conditions for safe storage : 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.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

#### Personal protective equipment

Respiratory protection : In case of dust exposure wear suitable personal respiratory

protection and protective suit.

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.

Eye protection : Eye wash bottle with pure water

Tightly fitting safety goggles

according to the Globally Harmonized System



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Skin and body protection : Dust impervious protective suit

Choose body protection according to the amount and concen-

tration of the dangerous substance at the work place.

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.

Hygiene measures : When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and at the end of workday.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : granules

Color : light brown

Odor : Faint odour

Odor Threshold : not determined

pH : 6.3

Concentration: 1 %

In a 1% aqueous dispersion

Melting point/freezing point : not determined

Boiling point/boiling range : not determined Decomposition

Flash point : not determined

Evaporation rate : not determined

Flammability (solid, gas) : The product is not flammable.

Self-ignition : > 400 °C

Upper explosion limit / Upper : not determined

according to the Globally Harmonized System



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flammability limit

Lower explosion limit / Lower

flammability limit

: not determined

Vapor pressure : Not available for this mixture.

Relative vapor density : Not applicable

Relative density : not determined

Bulk density : 0.63 g/m3 Pour density

0.66 g/m3 Tap density

Solubility(ies)

Water solubility : emulsifiable

Partition coefficient: n-

octanol/water

Not available for this mixture.

Decomposition temperature : Not available for this mixture.

Viscosity

Viscosity, kinematic : Not applicable

Explosive properties : Not explosive

Oxidizing properties : Non-oxidizing

Particle size : No data available

#### 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : No decomposition if stored and applied as directed.

Possibility of hazardous reac-

tions

No decomposition if stored and applied as directed.

Dust may form explosive mixture in air.

Conditions to avoid : Heat, flames and sparks.

Protect from frost, heat and sunlight.

Incompatible materials : Avoid strong acids, bases, and oxidizers.

Hazardous decomposition

products

Stable under recommended storage conditions.

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#### 11. TOXICOLOGICAL INFORMATION

**Acute toxicity** 

May be harmful if swallowed.

**Product:** 

Acute oral toxicity : LD50 Oral(Rat, female): > 2,000 mg/kg

Method: OECD Test Guideline 425

Acute inhalation toxicity : LC50(Rat, male and female): > 5.08 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

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

Method: OECD Test Guideline 402

**Components:** 

tribenuron-methyl (ISO):

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

Method: OECD Test Guideline 425

Acute inhalation toxicity : LC50 (Rat): > 6 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

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

Method: OECD Test Guideline 402

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

#### sodium dimethylnaphthalenesulphonate:

according to the Globally Harmonized System



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Acute oral toxicity : LD50 (Rat): > 2,000 - 5,000 mg/kg

Method: OECD Test Guideline 401

LD50 (Rat): > 3,000 - 5,000 mg/kg Method: OECD Test Guideline 401

Remarks: Based on data from similar materials

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

Method: OECD Test Guideline 404

Remarks: Based on data from similar materials

Sodium alkylnaphthalenesulfonate formaldehyde condensate:

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

calcium carbonate:

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

Method: OECD Test Guideline 420

Acute inhalation toxicity : LC50 (Rat, male and female): > 3 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

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

Remarks : May cause mild irritation.

Minimal effects that do not meet the threshold for classifica-

tion.

**Components:** 

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.

florasulam (ISO):

according to the Globally Harmonized System



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Method : OECD Test Guideline 404

Result : No skin irritation

sodium dimethylnaphthalenesulphonate:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Skin irritation

Sodium alkylnaphthalenesulfonate formaldehyde condensate:

Remarks : No data available

calcium carbonate:

Species : Rabbit

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

Assessment : No eye irritation

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

Minimal effects that do not meet the threshold for classifica-

tion.

**Components:** 

tribenuron-methyl (ISO):

Species : Rabbit

Assessment : No eye irritation

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

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

florasulam (ISO):

Method : OECD Test Guideline 405

Result : No eye irritation

sodium dimethylnaphthalenesulphonate:

Method : OECD Test Guideline 437
Result : Irreversible effects on the eye

Species : Rabbit

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

according to the Globally Harmonized System



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Remarks : Based on data from similar materials

Sodium alkylnaphthalenesulfonate formaldehyde condensate:

Result : Eye irritation

calcium carbonate:

Species : Rabbit

Method : OECD Test Guideline 405

Result : No eye irritation

Respiratory or skin sensitization

Skin sensitization

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

Respiratory sensitization

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

**Product:** 

Test Type : Local lymph node assay (LLNA)

Routes of exposure : Skin contact

Species : mice

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

**Components:** 

tribenuron-methyl (ISO):

Test Type : Maximization Test

Species : Guinea pig

Assessment : May cause sensitization by skin contact.

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

florasulam (ISO):

Method : OECD Test Guideline 429

Result : Does not cause skin sensitization.

sodium dimethylnaphthalenesulphonate:

Result : Does not cause skin sensitization.

calcium carbonate:

Test Type : Local lymph node assay (LLNA)

Species : Mouse

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

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### Germ cell mutagenicity

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

#### **Components:**

tribenuron-methyl (ISO):

Germ cell mutagenicity -

Assessment

: Did not show mutagenic effects in animal experiments.

florasulam (ISO):

Genotoxicity in vitro : Test system: Chinese hamster ovary cells

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

Result: negative

sodium dimethylnaphthalenesulphonate:

Genotoxicity in vitro : Method: OECD Test Guideline 471

Result: negative

Method: OECD Test Guideline 476

Result: negative

calcium carbonate:

Genotoxicity in vitro : Test Type: reverse mutation assay

Method: OECD Test Guideline 471

Result: negative

Carcinogenicity

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

**Components:** 

tribenuron-methyl (ISO):

Remarks : No significant adverse effects were reported

Carcinogenicity - Assess-

ment

Did not show carcinogenic effects in animal experiments.

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:** 

tribenuron-methyl (ISO):

according to the Globally Harmonized System



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Reproductive toxicity - As-

sessment

No toxicity to reproduction

Animal testing did not show any effects on fetal development.,

Did not show teratogenic effects in animal experiments.

florasulam (ISO):

Reproductive toxicity - As-

sessment

No evidence of adverse effects on sexual function and fertility,

or on development, based on animal experiments.

calcium carbonate:

Effects on fertility : Test Type: reproductive and developmental toxicity study

Species: Rat, male and female Application Route: Ingestion Method: OECD Test Guideline 422

Result: negative

Effects on fetal development : Test Type: Pre-natal

Species: Rat

**Application Route: Oral** 

Method: OECD Test Guideline 414

Result: negative

STOT-single exposure

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

**Components:** 

tribenuron-methyl (ISO):

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

organ toxicant, single exposure.

florasulam (ISO):

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

organ toxicant, single exposure.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

**Product:** 

Assessment : May cause damage to organs through prolonged or repeated

exposure.

**Components:** 

tribenuron-methyl (ISO):

Target Organs : Thyroid, Nervous system

Assessment : May cause damage to organs through prolonged or repeated

exposure.

according to the Globally Harmonized System



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florasulam (ISO):

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

organ toxicant, repeated exposure.

Repeated dose toxicity

**Components:** 

tribenuron-methyl (ISO):

Species : Rabbit LOAEL : 80 mg/kg

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

florasulam (ISO):

Species : Rat LOAEL : 500 mg/kg

Exposure time : 90 day
Symptoms : kidney effects

calcium carbonate:

Species : Rat, male and female

NOAEL : 1,000 mg/kg
Application Route : Ingestion
Exposure time : 48 d

Method : OECD Test Guideline 422

**Aspiration toxicity** 

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

**Components:** 

tribenuron-methyl (ISO):

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

florasulam (ISO):

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

**Further information** 

**Product:** 

Remarks : Generally, sulphonylurea herbicides cause lethargy, confu-

sion, dizziness, seizures and coma on ingestion.

according to the Globally Harmonized System



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#### 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

**Product:** 

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

LC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

NOEC (Pseudokirchneriella subcapitata (green algae)):

0.0012 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.022

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

ErC50 (Lemna gibba G3 (gibbous duckweed)): 0.0026 mg/l

Exposure time: 7 d

NOEC (Lemna gibba G3 (gibbous duckweed)): 0.00052 mg/l

Exposure time: 7 d

Toxicity to terrestrial organ-

isms

LD50: > 111 µg/bee Exposure time: 48 h

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

LD50: > 162  $\mu$ g/bee Exposure time: 48 h

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

**Ecotoxicology Assessment** 

Acute aquatic toxicity : Very toxic to aquatic life.

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

**Components:** 

tribenuron-methyl (ISO):

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

Exposure time: 96 h

according to the Globally Harmonized System



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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

plants

EC50 (Pseudokirchneriella subcapitata (green algae)):

0.0208 mg/l

Exposure time: 120 h

EC50 (Lemna gibba (duckweed)): 0.00424 mg/l

Exposure time: 14 d

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)

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  $\mu$ g/bee Exposure time: 48 h

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

LD50: > 9.1  $\mu$ g/bee Exposure time: 48 h

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

according to the Globally Harmonized System



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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.

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)

LD50: > 100 µg/bee

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

sodium dimethylnaphthalenesulphonate:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 10 - 100 mg/l

according to the Globally Harmonized System



# TRIBENURON-METHYL 600 g/kg + FLORASULAM 200 g/kg WG

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

1.0 11.10.2024 50000856 Date of first issue: 11.10.2024

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

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

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC10 (Pseudokirchneriella subcapitata (green algae)): 135

mg/

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

EC50 (Pseudokirchneriella subcapitata (green algae)): > 810

mg/l

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

Toxicity to microorganisms : EC10 (Pseudomonas putida): > 100 mg/l

Exposure time: 16.5 h Method: DIN 38 412 Part 8

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

EC10: > 1 - 10 mg/l Exposure time: 21 d

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

**Ecotoxicology Assessment** 

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Sodium alkylnaphthalenesulfonate formaldehyde condensate:

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

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

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

Exposure time: 48 h

Method: OECD Test Guideline 202

Remarks: Based on data from similar materials

Toxicity to algae/aquatic

plants

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

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

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

according to the Globally Harmonized System



# TRIBENURON-METHYL 600 g/kg + FLORASULAM 200 g/kg WG

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

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mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

EC10: > 10 - 100 mg/l Exposure time: 21 d

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

Remarks: Based on data from similar materials

calcium carbonate:

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)): > 100 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC10 ( Desmodesmus subspicatus (green algae)): > 14 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 (activated sludge): > 1,000 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Toxicity to soil dwelling or-

ganisms

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

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

#### Persistence and degradability

**Product:** 

Biodegradability : Remarks: Product contains minor amounts of not readily bio-

degradable components, which may not be degradable in

waste water treatment plants.

Components:

tribenuron-methyl (ISO):

Biodegradability : Biodegradation: 29.4 %

Exposure time: 28 d

florasulam (ISO):

Biodegradability : Result: Not readily biodegradable.

according to the Globally Harmonized System



# TRIBENURON-METHYL 600 g/kg + FLORASULAM 200 g/kg WG

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

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sodium dimethylnaphthalenesulphonate:

Biodegradability : Result: Inherently biodegradable.

Method: OECD Test Guideline 301D

Sodium alkylnaphthalenesulfonate formaldehyde condensate:

Biodegradability : Result: Not readily biodegradable.

Remarks: Based on data from similar materials

calcium carbonate:

Biodegradability : Biodegradation: 90 %

Exposure time: 28 d

Method: OECD Test Guideline 301B

**Bioaccumulative potential** 

**Product:** 

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

**Components:** 

tribenuron-methyl (ISO):

Bioaccumulation : Bioconcentration factor (BCF): < 1

Remarks: Does not bioaccumulate.

Partition coefficient: n-

octanol/water

log Pow: -0.38

florasulam (ISO):

Bioaccumulation : Bioconcentration factor (BCF): < 2.21

Remarks: Does not bioaccumulate.

Partition coefficient: n-

octanol/water

log Pow: -1.1 (25 °C)

pH: 7

log Pow: 1.11 (25 °C)

pH: 3

log Pow: -1.79 (25 °C)

pH: 10

Mobility in soil

**Product:** 

Distribution among environ-

mental compartments

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

according to the Globally Harmonized System



# TRIBENURON-METHYL 600 g/kg + FLORASULAM 200 g/kg WG

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### **Components:**

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.

florasulam (ISO):

Distribution among environ-

mental compartments

Koc: 22 ml/g, log Koc: 1.34 Remarks: Highly mobile in soils

Stability in soil

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.

#### 13. DISPOSAL CONSIDERATIONS

**Disposal methods** 

Waste from residues : 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.

### 14. TRANSPORT INFORMATION

#### International Regulations

**UNRTDG** 

UN number : UN 3077

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Tribenuron-methyl, Florasulam)

Class :

Subsidiary risk : ENVIRONM.

according to the Globally Harmonized System



# TRIBENURON-METHYL 600 g/kg + FLORASULAM 200 g/kg WG

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

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Packing group : III

Labels : 9 (ENVIRONM.)

Environmentally hazardous : yes

IATA-DGR

UN/ID No. : UN 3077

Proper shipping name : Environmentally hazardous substance, solid, n.o.s.

(Tribenuron-methyl, Florasulam)

Class : 9 Packing group : III

Labels : Miscellaneous

Packing instruction (cargo

aircraft)

956 956

Packing instruction (passen: :

ger aircraft)

Environmentally hazardous : yes

**IMDG-Code** 

UN number : UN 3077

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Tribenuron-methyl, Florasulam)

Class : 9
Packing group : III
Labels : 9
EmS Code : F-A, S-F
Marine pollutant : yes

#### Transport in bulk according to IMO instruments

Not applicable for product as supplied.

#### 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.

#### 15. REGULATORY INFORMATION

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

The ingredients 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 chemical substance(s) exempt from

CEPA DSL Inventory requirements. It is regulated as a pesticide subject to Pest Control Products Act (PCPA) require-

according to the Globally Harmonized System



# TRIBENURON-METHYL 600 g/kg + FLORASULAM 200 g/kg WG

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ments. Read the PCPA label, authorized under the Pest Control Products Act, prior to using or handling this pest control

product.

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

#### 16. OTHER INFORMATION

Revision Date : 11.10.2024

Date format : dd.mm.yyyy

#### Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); 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; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumu-

according to the Globally Harmonized System



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lative 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; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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