according to the Hazardous Products Regulations



# Spartan® Herbicide Water Dispersible Granules

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

1.1 03/15/2024 50001020 Date of first issue: 03/01/2018

#### **SECTION 1. IDENTIFICATION**

**Product identifier** 

Product name Spartan® Herbicide Water Dispersible Granules

Other means of identification

Product code 50001020

Recommended use of the chemical and restrictions on use

Recommended use

**Restrictions on use** Use as recommended by the label.

Details of the supplier of the safety data sheet

<u>Manufacturer</u> FMC Corporation

2929 WALNUT ST

PHILADELPHIA PA 19104

**USA** 

Phone (AgHotline): 1-833-FMC-PPAC (1-833-362-7722),

Web: https://ag.fmc.com/ca/en

SDS-Info@fmc.com

Supplier Address FMC of Canada Limited

6755 Mississauga Road, Suite 204

Mississauga, ON L5N 7Y2

Canada

**Emergency telephone** 

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

1 800 / 424-9300 (CHEMTREC - U.S.A.) 1 703 / 741-5970 (CHEMTREC - International) 1 703 / 527-3887 (CHEMTREC - Alternate)

Medical emergency:

U.S.A. & Canada: +1 800 / 331-3148

All other countries: +1 651 / 632-6793 (Collect)

### **SECTION 2. HAZARDS IDENTIFICATION**

### GHS classification in accordance with the Hazardous Products Regulations

Specific target organ toxicity : Category 2 (Thyroid, Nervous system)

- repeated exposure

#### **GHS** label elements

according to the Hazardous Products Regulations



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Hazard pictograms :

Signal Word : Warning

Hazard Statements : H373 May cause damage to organs (Thyroid, Nervous system)

through prolonged or repeated exposure.

Precautionary Statements : Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read

and understood.

P260 Do not breathe dust.

P280 Wear protective gloves/ protective clothing/ eye protection/

face protection.

Response:

P314 Get medical advice/ attention if you feel unwell.

Disposal:

P501 Dispose of contents/ container to an approved waste dis-

posal plant.

Other hazards

None known.

## **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

### Components

Chemical name	Common	CAS-No.	Concentration (% w/w)
	Name/Synonym		
tribenuron-methyl (ISO)	tribenuron- methyl (ISO)	101200-48-0	75
sodium carbonate	· · · · ·	497-19-8	>= 1 - < 5
kaolin	kaolin	1332-58-7	>= 1 - < 5
Silicon dioxide	Silicon dioxide	112926-00-8	>= 1 - < 5

### **SECTION 4. 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 : Move to fresh air.

according to the Hazardous Products Regulations



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Consult a physician after significant exposure.

If unconscious, place in recovery position and seek medical

advice.

In case of skin contact : Take off all contaminated clothing immediately.

Wash contaminated clothing before re-use.

Wash off immediately with plenty of water for at least 15

minutes.

Get medical attention 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. Take victim immediately to hospital.

Most important symptoms and effects, both acute and

delayed

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.

### **SECTION 5. FIRE-FIGHTING MEASURES**

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

Unsuitable extinguishing

media

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

Nitrogen oxides (NOx)

Sulfur oxides Carbon oxides

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.

according to the Hazardous Products Regulations



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Special protective equipment :

for fire-fighters

Firefighters should wear protective clothing and self-contained

breathing apparatus.

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emer-

gency procedures

Use personal protective equipment.

Avoid dust formation. Avoid breathing dust.

Ensure adequate ventilation.

Do not touch or walk through the spilled material.

If it can be safely done, stop the leak.

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.

For disposal considerations see section 13.

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

Sweep up and shovel into suitable containers for disposal.

#### **SECTION 7. HANDLING AND STORAGE**

Advice on protection against :

fire and explosion

Avoid dust formation.

Provide appropriate exhaust ventilation at places where dust

is formed.

Advice on safe handling : Avoid formation of respirable particles.

Do not breathe vapors/dust.

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.

Conditions for safe storage : Keep container tigh

Keep container tightly closed in a dry and well-ventilated

place.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage.

Electrical installations / working materials must comply with

the technological safety standards.

Further information on stor-

age stability

No decomposition if stored and applied as directed.

according to the Hazardous Products Regulations



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### **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
kaolin	1332-58-7	TWA (Respirable)	2 mg/m3	CA AB OEL
		TWA (Respirable)	2 mg/m3	CA BC OEL
		TWAEV (respirable dust)	2 mg/m3	CA QC OEL
		TWA (Respirable particulate matter)	2 mg/m3	ACGIH
Silicon dioxide	112926-00-8	TWA (Respirable)	1.5 mg/m3	CA BC OEL
		TWA (Total)	4 mg/m3	CA BC OEL

#### Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust

ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Filter type : Particulates type

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

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.

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.

Ensure that eye flushing systems and safety showers are

located close to the working place. Wear suitable protective equipment.

In the context of professional plant protection use as recom-

according to the Hazardous Products Regulations



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mended, 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.

### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state : solid

Form : granular

Color : light brown

Odor : mild, sweet

pH : 8.0 (25 °C)

Concentration: 10 g/l

Melting point/freezing point : No data available

Initial boiling point and boiling

range

No data available

Flash point : Not applicable

Flammability (solid, gas) : Does not sustain combustion.

Self-ignition : 400 °C

Lower explosion limit / Lower

flammability limit

0.365 mg/m3

Density : No data available

Bulk density : 730 kg/m3

Solubility(ies)

Water solubility : dispersible

Solubility in other solvents : No data available

Viscosity

Viscosity, dynamic : No data available

according to the Hazardous Products Regulations



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Explosive properties Not explosive

Particle size No data available

#### **SECTION 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 Exposure to moisture.

Avoid dust formation.

Protect from frost, heat and sunlight.

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

Hazardous decomposition

products

Carbon oxides

Nitrogen oxides (NOx)

### **SECTION 11. TOXICOLOGICAL INFORMATION**

### **Acute toxicity**

Not classified based on available information.

Product:

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

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

Acute toxicity estimate: > 5 mg/l Acute inhalation toxicity

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

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

**Components:** 

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

according to the Hazardous Products Regulations



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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

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

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

Silicon dioxide:

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

Method: OECD Test Guideline 401

Remarks: Based on data from similar materials

Acute inhalation toxicity : LC0 (Rat, male and female): > 0.14 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Remarks: Based on data from similar materials

no mortality

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

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Remarks: Based on data from similar materials

#### Skin corrosion/irritation

Not classified based on available information.

**Product:** 

Species : Rabbit

Assessment : Not classified as irritant

Result : No skin irritation

Remarks : (Data on the product itself)

Information source: Internal study report

**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.

sodium carbonate:

Species : Rabbit Exposure time : 4 h

Method : OECD Test Guideline 404

Result : No skin irritation

kaolin:

Method : OECD Test Guideline 404

Result : No skin irritation

Silicon dioxide:

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

Remarks : Based on data from similar materials

Serious eye damage/eye irritation

Not classified based on available information.

**Product:** 

Species : Rabbit

Result : No eye irritation

Assessment : Not classified as irritant Remarks : (Data on the product itself)

Information source: Internal study report

according to the Hazardous Products Regulations



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**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.

sodium carbonate:

Species : Rabbit

Result : Irritation to eyes, reversing within 21 days

kaolin:

Result : No eye irritation

Method : OECD Test Guideline 405

Silicon dioxide:

Species : Rabbit

Result : No eye irritation

Method : OECD Test Guideline 405

Remarks : Based on data from similar materials

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

**Product:** 

Species : Guinea pig

Assessment : Not a skin sensitizer.

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

Remarks : (Data on the product itself)

Information source: Internal study report

**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.

kaolin:

Method : OECD Test Guideline 429

according to the Hazardous Products Regulations



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Result : Does not cause skin sensitization.

Germ cell mutagenicity

Not classified based on available information.

**Components:** 

tribenuron-methyl (ISO):

Germ cell mutagenicity -

Assessment

Did not show mutagenic effects in animal experiments.

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 -

Assessment

Weight of evidence does not support classification as a germ

cell mutagen.

kaolin:

Genotoxicity in vitro : Test Type: Ames test

Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Remarks: No data available

Silicon dioxide:

Genotoxicity in vitro : Test Type: reverse mutation assay

Method: OECD Test Guideline 471

Result: negative

Remarks: Based on data from similar materials

Genotoxicity in vivo : Species: Rat (male)

Application Route: Inhalation

Result: negative

Remarks: Based on data from similar materials

Carcinogenicity

Not classified based on available information.

**Components:** 

tribenuron-methyl (ISO):

Remarks : No significant adverse effects were reported

Carcinogenicity - Assess-

ment

Did not show carcinogenic effects in animal experiments.

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Silicon dioxide:

Species : Rat
Application Route : Oral
Exposure time : 103 weeks

Method : OECD Test Guideline 453

Result : negative

Remarks : Based on data from similar materials

Reproductive toxicity

Not classified based on available information.

**Components:** 

tribenuron-methyl (ISO):

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.

sodium carbonate:

Effects on fetal development : Specific Specific

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

kaolin:

Effects on fertility : Remarks: No data available

Effects on fetal development : Remarks: No data available

Silicon dioxide:

Effects on fertility : Species: Rat

General Toxicity Parent: NOAEL: 1.5 mg/kg bw/day

Fertility: NOAEL: > 6.9 mg/kg body weight

Effects on fetal development : Test Type: Embryo-fetal development

Species: Rat

Application Route: Oral

General Toxicity Maternal: NOAEL: 2 mg/kg bw/day Embryo-fetal toxicity.: NOAEL: 2 mg/kg bw/day

Symptoms: Reduced fetal weight., Reduced number of viable

fetuses.

Test Type: Embryo-fetal development

Species: Rabbit

according to the Hazardous Products Regulations



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Application Route: Oral

General Toxicity Maternal: NOAEL: 500 mg/kg bw/day Embryo-fetal toxicity.: NOAEL: 500 mg/kg bw/day

Symptoms: Reduced fetal weight., fused or incompletely ossi-

fied sternebrae

### STOT-single exposure

Not classified based on available information.

#### **Components:**

tribenuron-methyl (ISO):

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

organ toxicant, single exposure.

kaolin:

Remarks : No significant adverse effects were reported

### STOT-repeated exposure

May cause damage to organs (Thyroid, Nervous system) 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.

sodium carbonate:

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:

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

according to the Hazardous Products Regulations



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sodium carbonate:

Species : Rat, male and female

NOAEL : > 0.01 mg/kg

Application Route : inhalation (dust/mist/fume)

Test atmosphere : dust/mist

kaolin:

Remarks : No data available

Silicon dioxide:

Species : Rat, male and female

NOAEL : 2,500 mg/kg

Application Route : Oral Exposure time : 13 weeks

Method : OECD Test Guideline 408

Remarks : Based on data from similar materials

Species : Rat, male and female

NOAEL : 1.3 - 10 mg/l LOAEL : 5.9 mg/l Application Route : Inhalation Exposure time : 13 weeks

Method : OECD Test Guideline 413

Remarks : Based on data from similar materials

## **Aspiration toxicity**

Not classified based on available information.

## **Components:**

## tribenuron-methyl (ISO):

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

### **Further information**

**Product:** 

Remarks : Information presented in section 11 conforms to the require-

ments of the Hazardous Products Regulations (HPR) and WHMIS 2015. See Section 15 for applicable information conforming to the requirements of the Pest Management Regula-

tory Agency (PMRA).

Remarks : No data available

according to the Hazardous Products Regulations



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#### **SECTION 12. ECOLOGICAL INFORMATION**

### **Ecotoxicity**

**Product:** 

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 260 mg/l

Exposure time: 96 h

LC50 (Lepomis macrochirus (Bluegill sunfish)): 340 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 1,000 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

EbC50 (Pseudokirchneriella subcapitata (green algae)): 0.06

mg/l

Exposure time: 72 h

EC50 (Lemna gibba (duckweed)): 0.029 mg/l

Exposure time: 336 h

### **Components:**

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

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 (Cyprinodon variegatus (sheepshead minnow)): 114

mg/l

Exposure time: 21 d

Method: OECD Test Guideline 211

NOEC (Oncorhynchus mykiss (rainbow trout)): 560 mg/l

Exposure time: 21 d

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 41 mg/l

Exposure time: 21 d

according to the Hazardous Products Regulations



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Toxicity to soil dwelling or-

ganisms

NOEC (Eisenia fetida (earthworms)): 3.2 mg/kg

Exposure time: 56 d

Toxicity to terrestrial organ-

isms

LD50 (Colinus virginianus (Bobwhite quail)): > 2,250 mg/kg

LD50 (Colinus virginianus (Bobwhite quail)): > 5,620 ppm

Remarks: Dietary

LD50 (Anas platyrhynchos (Mallard duck)): > 5,620 ppm

Remarks: Dietary

LD50 (Apis mellifera (bees)): > 98.4 µg/bee

Exposure time: 48 h

End point: Acute contact toxicity

LD50 (Apis mellifera (bees)): > 9.1 µg/bee

Exposure time: 48 h

End point: Acute oral toxicity

**Ecotoxicology Assessment** 

Acute aquatic toxicity : Very toxic to aquatic life.

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

sodium carbonate:

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

Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other :

aquatic invertebrates

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

Exposure time: 48 h

Test Type: semi-static test

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

Method: OECD Test Guideline 201

Toxicity to daphnia and other : Remarks: No data available

according to the Hazardous Products Regulations



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aquatic invertebrates (Chron-

ic toxicity)

Toxicity to microorganisms : Remarks: No data available

Silicon dioxide:

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): > 10,000 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 10,000 mg/l

Exposure time: 24 h

Method: OECD Test Guideline 202

Remarks: Based on data from similar materials

Toxicity to algae/aquatic

plants

NOELR (Desmodesmus subspicatus (green algae)): 10,000

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

**Ecotoxicology Assessment** 

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

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

Persistence and degradability

**Components:** 

tribenuron-methyl (ISO):

Biodegradability : Biodegradation: 29.4 %

Exposure time: 28 d

sodium carbonate:

Biodegradability : Remarks: The methods for determining biodegradability are

not applicable to inorganic substances.

kaolin:

Biodegradability : Remarks: The methods for determining biodegradability are

not applicable to inorganic substances.

Silicon dioxide:

Biodegradability : Result: Not biodegradable

Remarks: Based on data from similar materials

according to the Hazardous Products Regulations



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**Bioaccumulative potential** 

**Components:** 

tribenuron-methyl (ISO):

Bioaccumulation : Bioconcentration factor (BCF): < 1

Remarks: Does not bioaccumulate.

Partition coefficient: n-

octanol/water

log Pow: -0.38

sodium carbonate:

Bioaccumulation : Remarks: Does not bioaccumulate.

kaolin:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-

octanol/water

Remarks: Not applicable

Silicon dioxide:

Bioaccumulation : Bioconcentration factor (BCF): 3.16

Remarks: Based on data from similar materials

Mobility in soil

**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.

kaolin:

Distribution among environ-

mental compartments

Remarks: Low mobility 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.

according to the Hazardous Products Regulations



# Spartan® Herbicide Water Dispersible Granules

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

1.1 03/15/2024 50001020 Date of first issue: 03/01/2018

#### **SECTION 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.

Dispose of as unused product. Do not re-use empty containers.

### **SECTION 14. TRANSPORT INFORMATION**

### International Regulations

**UNRTDG** 

UN number : UN 3077

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Tribenuron-methyl)

Class : 9

Subsidiary risk : ENVIRONM.

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)

Class : 9 Packing group : III

Labels : Miscellaneous

Packing instruction (cargo : 956

aircraft)

Packing instruction (passen- : 956

ger aircraft)

Environmentally hazardous : yes

**IMDG-Code** 

UN number : UN 3077

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Tribenuron-methyl)

Class : 9
Packing group : III
Labels : 9
EmS Code : F-A

EmS Code : F-A, S-F Marine pollutant : yes

according to the Hazardous Products Regulations



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Remarks : Environmentally hazardous substances/Marine Pollutants in

single or combination packaging containing a net quantity per single or inner packaging of 5 kg or less for solids, or having a net quantity per single or inner packaging of 5 L or less for liquids may be transported as non-dangerous goods as provided in special provision A197 of the IATA and section

2.10.2.7 of IMDG code.

## Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

## **Domestic regulation**

**TDG** 

UN number : UN 3077

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

()

Class : 9
Packing group : III
Labels : 9
ERG Code : 171
Marine pollutant : yes()

### 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.

### **SECTION 15. REGULATORY INFORMATION**

NPRI Components : Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-

tetramethylbutyl)phenyl]-.omega.-hydroxy-

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 the following components that are not

on the Canadian DSL nor NDSL.

METHYL 2-[4-METHOXY-6-METHYL-1,3,5-TRIAZIN-2-YL(METHYL)CARBAMOYLSULFAMOYL]BENZOATE

ENCS : Not in compliance with the inventory

ISHL : Not in compliance with the inventory

according to the Hazardous Products Regulations



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KECI : Not in compliance with the inventory

PICCS : Not in compliance with the inventory

IECSC : Not in compliance with the inventory

NZIoC : Not in compliance with the inventory

TECI: Not in compliance with the inventory

#### **Canadian lists**

No substances are subject to a Significant New Activity Notification.

#### **SECTION 16. OTHER INFORMATION**

#### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

CA AB OEL : Canada. Alberta, Occupational Health and Safety Code (table

2: OEL)

CA BC OEL : Canada. British Columbia OEL

CA QC OEL : Québec. Regulation respecting occupational health and safe-

ty, Schedule 1, Part 1: Permissible exposure values for air-

borne contaminants

ACGIH / TWA : 8-hour, time-weighted average
CA AB OEL / TWA : 8-hour Occupational exposure limit
CA BC OEL / TWA : 8-hour time weighted average

CA QC OEL / TWAEV : Time-weighted average exposure value

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 Develop-

according to the Hazardous Products Regulations



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ment; 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; 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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End of Material Safety Data Sheet