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# **GRANSTAR® MEGA**

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

#### 1.1 Product identifier

Product name GRANSTAR® MEGA

Other means of identification

Product code 50000084

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

Use of the Sub- Herbicide

stance/Mixture

Recommended restrictions

on use

Use as recommended by the label.

#### 1.3 Details of the supplier of the safety data sheet

<u>Supplier Address</u> FMC France

11 bis Quai Perrache

69002 LYON France

Telephone: 04 37 23 65 70 Telefax: 04 78 71 08 46

E-mail address: SDS-Info@fmc.com, fmc.france@fmc.com .

# 1.4 Emergency telephone number

For leak, fire, spill or accident emergencies, call: Company emergency number - BIG (24 hours):

+32 14 58 45 45

Medical emergency: Poison centers in France: Paris: 01.40.05.48.48 Lyon: 04.72.11.69.11 Marseille: 04.91.75.25.25 Lille: 0800 59 59 59

ORFILA: +33 (0) 1 45 42 59 59 (poison control center) Company: 04.37.23.65.70, accessible from 8:30 am to 6:00

pm, Monday to Friday

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

#### 2.1 Classification of the substance or mixture

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

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

Specific target organ toxicity - repeated H373: May cause damage to organs through pro-

exposure, Category 2 longed or repeated exposure.

Short-term (acute) aquatic hazard, Cate-

gory 1

H400: Very toxic to aquatic life.

Long-term (chronic) aquatic hazard, Cat-

egory 1

H410: Very toxic to aquatic life with long lasting

effects.

#### 2.2 Label elements

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

Hazard pictograms :







Signal word : Warning

Hazard statements : H317 May cause an allergic skin reaction.

H373 May cause damage to organs through prolonged or

repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : Prevention:

P260 Do not breathe dust.

P273 Avoid release to the environment.

P280 Wear protective gloves.

Response:

P314 Get medical advice/ attention if you feel unwell. P333 + P313 If skin irritation or rash occurs: Get medical

advice/ attention.
P391 Collect spillage.

#### Hazardous components which must be listed on the label:

Tribenuron-methyl

#### **Additional Labelling**

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.

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#### 2.3 Other hazards

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

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

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

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

#### 3.2 Mixtures

Components

Chemical name	CAS-No.	Classification	Concentration
	EC-No.		(% w/w)
	Index-No.		
	Registration number		
Tribenuron-methyl	101200-48-0	Skin Sens. 1; H317	50
	401-190-1	STOT RE 2; H373	
	607-177-00-9	(Thyroid, Nervous	
		system)	
		Aquatic Acute 1;	
		H400	
		Aquatic Chronic 1;	
		H410	
		M-Factor (Acute	
		aquatic toxicity): 100	
		M-Factor (Chronic	
		aquatic toxicity): 100	
thifensulfuron-methyl (ISO)	79277-27-3	Aquatic Acute 1;	25
		H400	
	016-096-00-2	Aquatic Chronic 1;	
		H410	
		M-Factor (Acute	
		aquatic toxicity): 100	
		M-Factor (Chronic	
		aquatic toxicity): 100	
		, , , , , , , , , , , , , , , , , , , ,	_
Residues (petroleum), catalytic	68425-94-5	Eye Irrit. 2; H319	>= 2,5 - < 10
reformer fractionator, sulfonated,		Aquatic Chronic 3;	
polymers with formaldehyde, so-		H412	
dium salts			

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Lignosulfonic acid, ethoxylated, sodium salts	68611-14-3	Skin Corr. 1; H314 Eye Irrit. 2; H319 STOT SE 3; H335 (Respiratory system)	>= 1 - < 3	
Sodium polynaphthalene sulphonate	9084-06-4	Eye Irrit. 2; H319	>= 1 - < 10	
Substances with a workplace exposure limit :				
kaolin	1332-58-7 310-194-1		>= 10 - < 20	

For explanation of abbreviations see section 16.

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

General advice : Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

If inhaled : Remove to fresh air.

If unconscious, place in recovery position and seek medical

advice.

Consult a physician after significant exposure.

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. Take victim immediately to hospital.

Do not induce vomiting without medical advice.

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

Risks : May cause an allergic skin reaction.

May cause damage to organs through prolonged or repeated

exposure.

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4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

**SECTION 5: Firefighting measures** 

5.1 Extinguishing media

Suitable extinguishing media : Water spray, fog, or regular foam.

Unsuitable extinguishing

media

High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

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

courses.

Hazardous combustion prod: :

ucts

Nitrogen oxides (NOx)

Sulphur oxides Carbon oxides Hydrogen cyanide

Thermal decomposition can lead to release of irritating gases

and vapours.

5.3 Advice for firefighters

Special protective equipment:

for firefighters

Wear self-contained breathing apparatus for firefighting if nec-

essary.

Further information : Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

**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.

Keep people away from and upwind of spill/leak.

Remove all sources of ignition.

Immediately evacuate personnel to safe areas.

Avoid dust formation.
Avoid breathing dust.
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.

For disposal considerations see section 13.

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6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

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

#### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of respirable particles.

Do not breathe vapours/dust.

Avoid exposure - obtain special instructions before use.

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

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

plication area.

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

regulations

Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

used.

Advice on protection against

fire and explosion

Avoid dust formation. Provide appropriate exhaust ventilation

at places where dust is formed.

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

Wash hands before breaks and at the end of workday.

#### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological

safety standards.

Further information on stor-

age stability

: No decomposition if stored and applied as directed.

#### 7.3 Specific end use(s)

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

approved by country-specific regulatory authorities.

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

#### 8.1 Control parameters

#### **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
kaolin	1332-58-7	VME	10 mg/m3	FR VLE
Further information	Indicative exp	osure limits		
		TWA (Respirable	0,1 mg/m3	2004/37/EC
		dust)		
Further information	Carcinogens or mutagens			

#### 8.2 Exposure controls

#### Personal protective equipment

Eye protection : Eye wash bottle with pure water

Tightly fitting safety goggles

Hand protection

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

butyl rubber or nitrile rubber.

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Skin and body protection : Dust impervious protective suit

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

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

protection and protective suit.

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

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

structions.

Wear suitable protective equipment.

Ensure that eye flushing systems and safety showers are

located close to the working place. 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.

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

9.1 Information on basic physical and chemical properties

Appearance : solid, granules

Colour : brown

Odour : mild

Odour Threshold : not determined

Melting point/freezing point : Not available for this mixture.

Initial boiling point and boiling

range

Not applicable

Flammability : Does not sustain combustion.

Upper explosion limit / Upper

flammability limit

Not available for this mixture.

Lower explosion limit / Lower

flammability limit

Not available for this mixture.

Flash point : Not applicable

Auto-ignition temperature : No data available

Decomposition temperature : No data available

pH : Not available for this mixture.

Viscosity

Viscosity, dynamic : Not applicable

Viscosity, kinematic : No data available

Solubility(ies)

Water solubility : dispersible

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

Not applicable

Vapour pressure : Not available for this mixture.

Relative density : Not available for this mixture.

Density : Not available for this mixture.

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Bulk density : Not available for this mixture.

Relative vapour density : Not applicable

Particle characteristics

Particle size : No data available

Particle Size Distribution : No data available

Shape : No data available

9.2 Other information

Explosives : Not explosive

Oxidizing properties : The product is not oxidizing.

Self-ignition : Auto-ignition temperature

Not available for this mixture.

Evaporation rate : Not applicable

#### **SECTION 10: Stability and reactivity**

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if stored and applied as directed.

Dust may form explosive mixture in air.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Avoid strong acids, bases, and oxidizers

#### 10.6 Hazardous decomposition products

Stable under recommended storage conditions.

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#### **SECTION 11: Toxicological information**

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

#### **Acute toxicity**

Not classified based on available information.

**Product:** 

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

Method: OECD Test Guideline 401

GLP: yes

Remarks: Toxicology data for the components Information source: Internal study report

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

Exposure time: 4 h

Test atmosphere: dust/mist

Remarks: Toxicology data for the components Information source: Internal study report

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

Method: OECD Test Guideline 402

GLP: yes

Remarks: Toxicology data for the components Information source: Internal study report

#### Components:

Tribenuron-methyl:

Acute oral toxicity : LD50: > 5.000 mg/kg

Method: OECD Test Guideline 425

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

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

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

Method: OECD Test Guideline 402

thifensulfuron-methyl (ISO):

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

Acute inhalation toxicity : LC50 (Rat): > 5,03 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

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

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

hyde, sodium salts:

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

Lignosulfonic acid, ethoxylated, sodium salts:

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

Sodium polynaphthalene sulphonate:

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

Remarks: Based on data from similar materials

kaolin:

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

Method: OECD Test Guideline 401

LD50: > 2.000 mg/kg

Method: OECD Test Guideline 420

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

icity

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

Method: OECD Test Guideline 436

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

LD50: > 2.000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Skin corrosion/irritation

Not classified based on available information.

**Product:** 

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

GLP : yes

Remarks : Toxicology data for the components

Information source: Internal study report

**Components:** 

Tribenuron-methyl:

Species : Rabbit

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

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

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thifensulfuron-methyl (ISO):

Assessment : No skin irritation

Method : OECD Test Guideline 404

Remarks : Minimal effects that do not meet the threshold for classifica-

tion.

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

hyde, sodium salts:

Remarks : No data available

kaolin:

Method : OECD Test Guideline 404

Result : No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

**Product:** 

Species : Rabbit

Method : OECD Test Guideline 405

Result : No eye irritation

GLP : yes

Remarks : Toxicology data for the components

Information source: Internal study report

Remarks : Product dust may be irritating to eyes, skin and respiratory

system.

**Components:** 

Tribenuron-methyl:

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.

thifensulfuron-methyl (ISO):

Method : OECD Test Guideline 405

Result : No eye irritation

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

hyde, sodium salts:

Result : Eye irritation

Lignosulfonic acid, ethoxylated, sodium salts:

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Result : Moderate eye irritation

Sodium polynaphthalene sulphonate:

Result : Eye irritation

kaolin:

Method : OECD Test Guideline 405

Result : No eye irritation

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified based on available information.

Product:

Species : Guinea pig

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

GLP : no

Remarks : Toxicology data for the components

Information source: Internal study report

Remarks : May cause sensitisation by skin contact.

Information refers to the main component.

**Components:** 

Tribenuron-methyl:

Test Type : Maximisation Test

Species : Guinea pig

Assessment : May cause sensitisation by skin contact.

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

thifensulfuron-methyl (ISO):

Species : Guinea pig

Method : OECD Test Guideline 429

Result : Does not cause skin sensitisation.

kaolin:

Method : OECD Test Guideline 429

Result : Does not cause skin sensitisation.

Germ cell mutagenicity

Not classified based on available information.

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**Components:** 

Tribenuron-methyl:

Germ cell mutagenicity- As-

sessment

Did not show mutagenic effects in animal experiments.

thifensulfuron-methyl (ISO):

Genotoxicity in vitro : Test system: Chinese hamster ovary cells

Method: OECD Test Guideline 476

Result: negative

Remarks: In vitro tests did not show mutagenic effects

Germ cell mutagenicity- As-

sessment

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

Carcinogenicity

Not classified based on available information.

**Components:** 

Tribenuron-methyl:

Remarks : No significant adverse effects were reported

Carcinogenicity - Assess-

ment

Did not show carcinogenic effects in animal experiments.

thifensulfuron-methyl (ISO):

Carcinogenicity - Assess-

ment

Weight of evidence does not support classification as a car-

cinogen

Reproductive toxicity

Not classified based on available information.

**Components:** 

Tribenuron-methyl:

Reproductive toxicity - As-

No toxicity to reproduction

sessment

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

thifensulfuron-methyl (ISO):

Reproductive toxicity - As- : Did not show teratogenic effects in animal experiments.

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sessment

kaolin:

Effects on fertility : Remarks: No data available

Effects on foetal develop-

ment

Remarks: No data available

STOT - single exposure

Not classified based on available information.

**Components:** 

Tribenuron-methyl:

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

organ toxicant, single exposure.

Lignosulfonic acid, ethoxylated, sodium salts:

Assessment : May cause respiratory irritation.

kaolin:

Remarks : No significant adverse effects were reported

STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

**Components:** 

Tribenuron-methyl:

Target Organs : Thyroid, Nervous system

Assessment : May cause damage to organs through prolonged or repeated

exposure.

kaolin:

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

organ toxicant, repeated exposure.

Repeated dose toxicity

**Components:** 

Tribenuron-methyl:

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

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thifensulfuron-methyl (ISO):

Species : Rat

LOAEL : ca.200 mg/kg

Exposure time : 90 d

Target Organs : No specific target organs noted

Symptoms : Reduced body weight

kaolin:

Remarks : No data available

**Aspiration toxicity** 

Not classified based on available information.

**Components:** 

Tribenuron-methyl:

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

Toxicity to daphnia and other :

aquatic invertebrates

Remarks: No data is available on the product itself.

Toxicity to algae/aquatic

plants

Remarks: No data is available on the product itself.

Toxicity to soil dwelling or-

ganisms

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

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Toxicity to terrestrial organ-

isms

Remarks: No data is available on the product itself.

**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:

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

ErC50 (Raphidocelis subcapitata (freshwater green alga)):

0,068 mg/l

Exposure time: 72 h

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

Exposure time: 7 d

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

Exposure time: 7 d

M-Factor (Acute aquatic tox-

icity)

100

Toxicity to fish (Chronic tox-

icity)

NOEC: 114 mg/l

Exposure time: 21 d

Species: Cyprinodon variegatus (sheepshead minnow)

Method: OECD Test Guideline 211

NOEC: 560 mg/l Exposure time: 21 d

Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 41 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

M-Factor (Chronic aquatic

toxicity)

100

Toxicity to soil dwelling or-

ganisms

NOEC: 3,2 mg/kg Exposure time: 56 d

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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 µg/bee Exposure time: 48 h

End point: Acute oral 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.

thifensulfuron-methyl (ISO):

Toxicity to fish : LC50 (Salmo gairdneri): 100 mg/l

Exposure time: 96 h

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

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

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

Exposure time: 48 h

Toxicity to algae/aquatic

plants

IC50 (green algae): 0,0159 mg/l

Exposure time: 72 h

ErC50 (Raphidocelis subcapitata (freshwater green alga)): 1,4

mg/l

Exposure time: 72 h

EC50 (Lemna minor (duckweed)): 1,3 μg/l

M-Factor (Acute aquatic tox-

icity)

100

Toxicity to fish (Chronic tox-

icity)

NOEC: 250 mg/l Exposure time: 28 d

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Species: Salmo gairdneri

NOEC: 10,6 mg/l Exposure time: 21 d

Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 100 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

M-Factor (Chronic aquatic

toxicity)

100

Toxicity to soil dwelling or-

ganisms

LC50: > 2.000 mg/kg

Species: Eisenia fetida (earthworms)

Toxicity to terrestrial organ-

isms

LD50: > 2.510 mg/kg

Species: Anas platyrhynchos (Mallard duck)

LD50: > 5.620 ppm

Species: Anas platyrhynchos (Mallard duck)

Remarks: Dietary

LD50: > 5.620 ppm

Species: Colinus virginianus (Bobwhite quail)

LD50: >  $7.1 \mu g/bee$ 

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

LD50: > 100 µg/bee

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.

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

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

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

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

Exposure time: 48 h

Method: OECD Test Guideline 202

Remarks: Based on data from similar materials

Toxicity to algae/aquatic EC50 (Pseudokirchneriella subcapitata (green algae)): > 100

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plants mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

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

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

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

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

Remarks: Based on data from similar materials

#### Sodium polynaphthalene sulphonate:

Toxicity to daphnia and other : EC50: 5,37 - 8,77 mg/l aquatic invertebrates (Chron- Exposure time: 45 d

ic toxicity)

Species: Daphnia magna (Water flea)

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 microorganisms

Remarks: No data available

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

Remarks: No data available

#### 12.2 Persistence and degradability

**Product:** 

Biodegradability : Result: Not readily biodegradable.

Remarks: Estimation based on data obtained on active ingre-

dient.

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**Components:** 

Tribenuron-methyl:

Biodegradability : Result: Not readily biodegradable.

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

ronment.

Primary degradation half-lives vary with circumstances, from a

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

Metabolites are considered as persistent.

According to the results of tests of biodegradability this prod-

uct is not readily biodegradable.

thifensulfuron-methyl (ISO):

Biodegradability : Remarks: Not readily biodegradable.

Primary degradation half-lives vary with circumstances, from a

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

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

Biodegradability : Result: Not readily biodegradable.

Remarks: Based on data from similar materials

Lignosulfonic acid, ethoxylated, sodium salts:

Biodegradability : Result: Not readily biodegradable.

Sodium polynaphthalene sulphonate:

Biodegradability : Result: Not readily biodegradable.

Remarks: According to the results of tests of biodegradability

this product is not readily biodegradable.

kaolin:

Biodegradability : Remarks: The methods for determining biodegradability are

not applicable to inorganic substances.

12.3 Bioaccumulative potential

**Product:** 

Bioaccumulation : Remarks: Does not bioaccumulate.

Estimation based on data obtained on active ingredient.

Components:

**Tribenuron-methyl:** 

Bioaccumulation : Bioconcentration factor (BCF): < 1

Remarks: Does not bioaccumulate.

Partition coefficient: n-

octanol/water

log Pow: -0,38

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thifensulfuron-methyl (ISO):

Bioaccumulation Bioconcentration factor (BCF): 1

Remarks: Does not bioaccumulate.

kaolin:

Bioaccumulation Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-

octanol/water

Remarks: Not applicable

12.4 Mobility in soil

**Product:** 

Distribution among environ-

mental compartments

Remarks: Potentially mobile, but the leaching potential is miti-

gated by rapid degradation in viable agricultural soils.

**Components:** 

Tribenuron-methyl:

Distribution among environ-

mental 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.

thifensulfuron-methyl (ISO):

Distribution among environmental compartments

Koc: 28,3, log Koc: 1,45

Remarks: Highly mobile in soils

Stability in soil

kaolin:

Distribution among environ-

mental compartments

Remarks: Low mobility in soil

12.5 Results of PBT and vPvB assessment

**Product:** 

Assessment This substance/mixture contains no components considered

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

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

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



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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

No other ecological effects to be specially mentioned.

See product label for additional application instructions relat-

ing to environmental precautions.

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 hazardous waste management company

(such as A.D.I.VALOR).

Contaminated packaging : Empty and rinse the container.

Dispose of as hazardous material. Do not re-use empty containers.

Bring the opened, rinsed and drained containers to a company

authorized to dispose of hazardous waste (such as

A.D.I.VALOR).

Waste disposal code: 02 01 08 agrochemical waste containing

dangerous substances.

#### **SECTION 14: Transport information**

#### 14.1 UN number or ID number

ADN : UN 3077
ADR : UN 3077
RID : UN 3077
IMDG : UN 3077
IATA : UN 3077

14.2 UN proper shipping name

ADN : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

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



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(Tribenuron-methyl, Thifensulfuron-methyl)

**ADR** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Tribenuron-methyl, Thifensulfuron-methyl)

**RID** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

(Tribenuron-methyl, Thifensulfuron-methyl)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, **IMDG** 

(Tribenuron-methyl, Thifensulfuron-methyl)

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

(Tribenuron-methyl, Thifensulfuron-methyl)

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 Ш Classification Code M7 Hazard Identification Number : 90 Labels 9

**ADR** 

Packing group Ш Classification Code M7 Hazard Identification Number : 90 Labels 9 Tunnel restriction code (-)

**RID** 

Packing group Ш Classification Code M7 Hazard Identification Number : 90 Labels 9

**IMDG** 

Packing group Ш Labels **EmS Code** F-A, S-F

IATA (Cargo)

Packing instruction (cargo

aircraft)

Packing instruction (LQ) Y956

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956

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Packing group : III

Labels : Miscellaneous

IATA (Passenger)

Packing instruction (passen- : 956

ger aircraft)

Packing instruction (LQ) : Y956 Packing group : III

Labels : Miscellaneous

14.5 Environmental hazards

**ADN** 

Environmentally hazardous : yes

**ADR** 

Environmentally hazardous : yes

rid

Environmentally hazardous : yes

**IMDG** 

Marine pollutant : yes

IATA (Passenger)

Environmentally hazardous : yes

IATA (Cargo)

Environmentally hazardous : yes

#### 14.6 Special precautions for user

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

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

Not applicable for product as supplied.

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

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) Conditions of restriction for the following entries should be considered: formaldehyde (Number on list 72, 28)

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

Not applicable

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

plete the ozone layer

: Not applicable

Regulation (EU) 2019/1021 on persistent organic pollu- : Not applicable

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tants (recast)

Regulation (EC) No 649/2012 of the European Parlia: Not applicable

ment and the Council concerning the export and import

of dangerous chemicals

REACH - List of substances subject to authorisation : Not applicable

(Annex XIV)

Seveso III: Directive 2012/18/EU of the Euro- E1 ENVIRONMENTAL HAZARDS

pean Parliament and of the Council on the control of major-accident hazards involving

dangerous substances.

Occupational Illnesses (R- : 25, 78, 43bis

461-3, France)

Reinforced medical supervi-

sion (R4624-18)

The product has no CMR properties

ICPE section (Installations classified for environmental protection; Environmental

code R511-9)

4510

#### Other regulations:

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

#### The components of this product are reported in the following inventories:

TCSI : Not in compliance with the inventory

TSCA : Product contains substance(s) not listed on TSCA inventory.

AIIC : Not in compliance with the inventory

DSL : This product contains the following components that are not

on the Canadian DSL nor NDSL.

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

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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**

H314 : Causes severe skin burns and eye damage.

H317 : May cause an allergic skin reaction.
H319 : Causes serious eye irritation.
H335 : May cause respiratory irritation.

H373 : May cause damage to organs through prolonged or repeated

exposure.

H400 : Very toxic to aquatic life.

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

#### Full text of other abbreviations

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

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

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

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

from the risks related to exposure to carcinogens or mutagens

at work

FR VLE : France. Occupational Exposure Limits

2004/37/EC / TWA : Long term exposure limit FR VLE / VME : Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL

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- Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### **Further information**

#### Classification of the mixture: Classification procedure:

Skin Sens. 1	H317	Calculation method
STOT RE 2	H373	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 1	H410	Calculation method

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