# **FUZILIER SELECTIVE HERBICIDE**



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### **SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : FUZILIER SELECTIVE HERBICIDE

Recommended use of the chemical and restrictions on use

Recommended use : Can be used as herbicide only.

Restrictions on use : Use as recommended by the label.

Manufacturer or supplier's details

Company : FMC Australasia Pty Ltd

Address : Building B, Suite G.01, 12 Julius Avenue

North Ryde NSW 2113

Australia

Telephone : 1 800 066 355

Telefax : (02) 9923 6011

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

Emergency telephone number : For leak, fire, spill or accident emergencies, call:

1800 033 111 (Ixom)

Medical emergency:

1 800 033 111 (Transport and 24 h Medical information)

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

**GHS Classification** 

Flammable liquids : Category 4

Serious eye damage/eye irri-

tation

Category 2A

Carcinogenicity : Category 2

Reproductive toxicity : Category 2

Specific target organ toxicity - :

single exposure

Category 3 (Central nervous system)

Aspiration hazard : Category 1

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### **GHS** label elements

Hazard pictograms





Signal word : Danger

Hazard statements : H227 Combustible liquid.

H304 May be fatal if swallowed and enters airways.

H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H351 Suspected of causing cancer.

H361 Suspected of damaging fertility or the unborn child.

Supplemental Hazard State-

ments

AUH066 Repeated exposure may cause skin dryness or crack-

ing.

Precautionary statements : Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat, hot surfaces, sparks, open flames

and other ignition sources. No smoking. P261 Avoid breathing mist or vapours. P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ protective clothing/ eye protec-

tion/ face protection/ hearing protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON

CENTER/ doctor.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/

doctor if you feel unwell.

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

easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/

attention.

P331 Do NOT induce vomiting.

P337 + P313 If eye irritation persists: Get medical advice/ at-

ention.

P370 + P378 In case of fire: Use dry sand, dry chemical or

alcohol-resistant foam to extinguish.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container

tightly closed.

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste

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disposal plant.

#### Other hazards which do not result in classification

Very toxic to aquatic life with long lasting effects.

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

Substance / Mixture : Mixture

### Components

Chemical name	CAS-No.	Concentration (% w/w)
fluazifop-P-butyl (ISO)	79241-46-6	>= 20 -< 25
Solvent naphtha (petroleum), heavy arom.;	64742-94-5	>= 50 -< 70
Kerosine — unspecified		
Benzenesulfonic acid, C10-16-alkyl derivs.,	68584-23-6	>= 1 -< 3
calcium salts		
2-ethylhexan-1-ol	104-76-7	< 10

#### **SECTION 4. FIRST AID MEASURES**

General advice Move out of dangerous area.

Show this safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later.

Do not leave the victim unattended.

If inhaled Consult a physician after significant exposure.

If unconscious, place in recovery position and seek medical

advice.

In case of skin contact If skin irritation persists, call a physician.

> If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact Immediately flush eye(s) with plenty of water.

> Remove contact lenses. Protect unharmed eve.

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.

> Keep respiratory tract clear. Do NOT induce vomiting.

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 be fatal if swallowed and enters airways.

Causes serious eye irritation.

May cause drowsiness or dizziness.

Suspected of causing cancer.

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Suspected of damaging fertility or the unborn child. Repeated exposure may cause skin dryness or cracking.

Notes to physician : Treat symptomatically.

### **SECTION 5. FIREFIGHTING MEASURES**

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

Unsuitable extinguishing

media

High volume water jet

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.

Fluorinated compounds

Hydrogen fluoride Carbon oxides

Nitrogen oxides (NOx) Hydrogen cyanide Chlorine 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.

For safety reasons in case of fire, cans should be stored sepa-

rately in closed containments.

Use a water spray to cool fully closed containers.

Special protective equipment:

for firefighters

Firefighters should wear protective clothing and self-contained

breathing apparatus.

Hazchem Code : •3Z

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

Personal precautions, protective equipment and emer-

gency procedures

Use personal protective equipment.

Ensure adequate ventilation.

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

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local

/ national regulations (see section 13).

Keep in suitable, closed containers for disposal.

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

Advice on protection against

fire and explosion

Do not spray on a naked flame or any incandescent material. Keep away from open flames, hot surfaces and sources of

ignition.

Advice on safe handling : Avoid formation of aerosol.

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.

Hygiene measures : When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and at the end of workday.

Conditions for safe storage : No smoking.

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. Observe label precautions.

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.

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

## Components with workplace control parameters

Components	CAS-No.	Value type (Form of	Control parameters / Permissible	Basis
		exposure)	concentration	
Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified	64742-94-5	TWA	200 mg/m3 (total hydrocarbon vapor)	ACGIH
2-ethylhexan-1-ol	104-76-7	TWA	5 ppm	ACGIH

## Personal protective equipment

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

sonal respiratory protection and protective suit.

Hand protection

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

butyl rubber or nitrile rubber.

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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

Wear face-shield and protective suit for abnormal processing

problems.

Skin and body protection : Impervious clothing

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

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

Appearance : liquid

Colour : clear, amber

Odour : hydrocarbon-like

pH : 3.5 - 6

(1% emulsion)

Melting point/freezing point : not determined

Boiling point/boiling range : not determined

Flash point : not determined

Self-ignition : 260 °C

Upper explosion limit / Upper

flammability limit

not determined

Lower explosion limit / Lower

flammability limit

not determined

Density : 0.98 - 1 g/cm3 (20 °C)

Solubility(ies)

Water solubility : emulsifiable

Partition coefficient: n-

octanol/water

: Not applicable

Viscosity

Viscosity, kinematic : not determined

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Explosive properties : Not explosive

Oxidizing properties : Non-oxidizing

Particle size : Not applicable

### **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.

Vapours may form explosive mixture with air.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Strong acids and strong bases

Strong oxidizing agents

Hazardous decomposition

products

Stable under recommended storage conditions.

# **SECTION 11. TOXICOLOGICAL INFORMATION**

#### **Acute toxicity**

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

Product:

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

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

**Components:** 

fluazifop-P-butyl (ISO):

Acute oral toxicity : LD50 (Rat, male): 5,013 mg/kg

LD50 (Rat, female): 3,687 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5.2 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

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Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

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 : LC50 (Rat, male and female): > 5.28 mg/l

Exposure time: 4 h
Test atmosphere: vapour

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rabbit, male and female): > 2,000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: Based on data from similar materials

Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts:

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 : LD50 (Rat, male and female): > 1.9 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 (Rabbit, male and female): > 4,000 mg/kg

Remarks: Based on data from similar materials

2-ethylhexan-1-ol:

Acute oral toxicity : LD50 (Rat, male): 2,047 mg/kg

Acute inhalation toxicity : LC50 (Rat): 4.3 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat, male and female): > 3,000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Skin corrosion/irritation

Repeated exposure may cause skin dryness or cracking.

**Product:** 

Remarks : May cause skin irritation and/or dermatitis.

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**Components:** 

fluazifop-P-butyl (ISO):

Species : Rabbit

Result : No skin irritation

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Species : Rabbit

Result : No skin irritation

Assessment : Repeated exposure may cause skin dryness or cracking.

Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts:

Assessment : Irritating to skin.

2-ethylhexan-1-ol:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

**Product:** 

Remarks : May cause irreversible eye damage.

**Components:** 

fluazifop-P-butyl (ISO):

Species : Rabbit

Result : slight irritation

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Species : Rabbit

Result : No eye irritation

Remarks : Based on data from similar materials

Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts:

Assessment : Risk of serious damage to eyes.

2-ethylhexan-1-ol:

Species : Rabbit

Result : Irritation to eyes, reversing within 21 days

Method : OECD Test Guideline 405

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### Respiratory or skin sensitisation

#### Skin sensitisation

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

## Respiratory sensitisation

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

## **Components:**

#### fluazifop-P-butyl (ISO):

Species : Guinea pig

Result : Does not cause skin sensitisation.

### Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Test Type : Buehler Test Species : Guinea pig

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

### Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts:

Test Type : Buehler Test Species : Guinea pig

Result : Not a skin sensitizer.

Remarks : Based on data from similar materials

#### **Chronic toxicity**

## Germ cell mutagenicity

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

#### Components:

## Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Genotoxicity in vitro : Test Type: reverse mutation assay

Result: negative

Remarks: Based on data from similar materials

Genotoxicity in vivo : Test Type: sister chromatid exchange assay

Species: Mouse

Application Route: Intraperitoneal injection

Result: negative

Remarks: Based on data from similar materials

## Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts:

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 : Test Type: Micronucleus test

Species: Mouse (male and female)

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Application Route: Intraperitoneal injection

Exposure time: 72 hrs

Method: Mutagenicity (micronucleus test)
Remarks: Based on data from similar materials

2-ethylhexan-1-ol:

Genotoxicity in vitro : Test Type: reverse mutation assay

Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Mouse

Application Route: Intraperitoneal injection

Result: negative

Carcinogenicity

Suspected of causing cancer.

**Components:** 

fluazifop-P-butyl (ISO):

Carcinogenicity - Assess-

ment

: No evidence of carcinogenicity in animal studies.

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Species : Mouse
Application Route : Dermal
Exposure time : 104 weeks
Result : negative

Remarks : Based on data from similar materials

Carcinogenicity - Assess-

ment

Limited evidence of carcinogenicity in animal studies

2-ethylhexan-1-ol:

Species : Rat Application Route : Oral

Exposure time : 24 month(s)
Result : negative

Reproductive toxicity

Suspected of damaging fertility or the unborn child.

**Components:** 

fluazifop-P-butyl (ISO):

Reproductive toxicity - As-

sessment

Some evidence of adverse effects on development, based on

animal experiments.

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

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Effects on fertility : Test Type: Fertility

Species: Rat, male and female

Application Route: Oral

Method: OECD Test Guideline 415

Result: negative

Remarks: Based on data from similar materials

Effects on foetal develop-

ment

Test Type: reproductive and developmental toxicity study

Species: Rat

**Application Route: Oral** 

Method: OECD Test Guideline 414

Result: negative

Remarks: Based on data from similar materials

Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts:

Effects on fertility : Test Type: one-generation reproductive toxicity

Species: Rat, male and female

Application Route: Oral

Method: OECD Test Guideline 415

Result: No effects on fertility and early embryonic develop-

ment were detected.

2-ethylhexan-1-ol:

Effects on foetal develop-

ment

Test Type: Embryo-foetal development

Species: Mouse

**Application Route: Oral** 

Method: OECD Test Guideline 414

Result: negative

STOT - single exposure

May cause drowsiness or dizziness.

**Components:** 

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Assessment : May cause drowsiness or dizziness.

2-ethylhexan-1-ol:

Assessment : May cause respiratory irritation.

STOT - repeated exposure

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

Repeated dose toxicity

**Components:** 

fluazifop-P-butyl (ISO):

Species : Rat

NOAEL : 1 mg/kg bw/day





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Species : Dog

NOAEL : 25 mg/kg bw/day

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Species : Rat, male and female

NOAEL : 750 mg/kg Application Route : Oral - gavage

Exposure time : 90 day

Remarks : Based on data from similar materials

Species : Rat, male and female

NOAEL : 1 mg/l LOAEL : 0.5 mg/l

Application Route : inhalation (vapour)

Exposure time : 90 day

Symptoms : Alpha-2u-globulin nephropathy

Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts:

Species : Rat, male and female

NOAEL : 500 mg/kg Application Route : Oral

Method : OECD Test Guideline 407

Remarks : Based on data from similar materials

Species : Rat, male and female

NOAEL : 50 mg/m3 Application Route : Inhalation

Method : OECD Test Guideline 412

Remarks : Based on data from similar materials

Species : Rat, male and female

NOAEL : > 1,000 mg/kg

Application Route : Dermal

Method : OECD Test Guideline 410

Remarks : Based on data from similar materials

2-ethylhexan-1-ol:

Species : Rat

250 mg/kg

Application Route : Oral Exposure time : 13 Weeks

Method : OECD Test Guideline 408

**Aspiration toxicity** 

May be fatal if swallowed and enters airways.

Components:

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

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#### **Further information**

**Product:** 

Remarks : Symptoms of overexposure may be headache, dizziness,

tiredness, nausea and vomiting.

Concentrations substantially above the TLV value may cause

narcotic effects.

Solvents may degrease the skin.

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

## **Ecotoxicity**

## **Product:**

## **Ecotoxicology Assessment**

Acute aquatic toxicity : Very toxic to aquatic life.

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

### **Components:**

fluazifop-P-butyl (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1.3 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

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

Exposure time: 48 h

Toxicity to algae/aquatic

plants

: EbC50 (Navicula pelliculosa (Diatom)): 0.51 mg/l

Exposure time: 72 h

Toxicity to soil dwelling or-

ganisms

LC50 (worms): > 1,000 mg/kg

Toxicity to terrestrial organ-

isms

LD50 (Anas platyrhynchos (Mallard duck)): > 3,500 mg/kg

LD50 (Apis mellifera (bees)): > 200 µg/bee

End point: Acute contact toxicity

LD50 (Apis mellifera (bees)): > 200 μg/bee

End point: Acute oral toxicity

LC50 (Colinus virginianus (Bobwhite quail)): > 5,230 ppm

Exposure time: 8 d Remarks: Dietary

## Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): 2 - 5 mg/l

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Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: water accommodated fractions (WAF)

Toxicity to daphnia and other :

aquatic invertebrates

EL50 (Daphnia magna (Water flea)): 1.4 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Remarks: water accommodated fractions (WAF)

Toxicity to algae/aquatic

plants

EL50 (Pseudokirchneriella subcapitata (green algae)): > 1 - 3

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: water accommodated fractions (WAF)

Toxicity to microorganisms : LL50 (Tetrahymena pyriformis): 677.9 mg/l

Exposure time: 72 h

Test Type: Growth inhibition

Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts:

Toxicity to fish : LL50 (Marine species): 10,000 mg/l

Exposure time: 96 h

Remarks: Based on data from similar materials

LL50 (Pimephales promelas (fathead minnow)): 1,000 mg/l

Exposure time: 96 h

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

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

Exposure time: 48 h

Remarks: Based on data from similar materials

Toxicity to algae/aquatic

plants

EL50 (Pseudokirchneriella subcapitata (green algae)): > 1,000

ma/

Exposure time: 96 h

Remarks: Based on data from similar materials

Toxicity to microorganisms : NOEC (activated sludge): 10,000 mg/l

Method: OECD Test Guideline 209

GLP: yes

**Ecotoxicology Assessment** 

Acute aquatic toxicity : Toxic to aquatic life.

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

2-ethylhexan-1-ol:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 17.1 - 28.2 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 39 mg/l

Exposure time: 48 h

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Toxicity to algae/aquatic

plants

EC10 (Desmodesmus subspicatus (green algae)): 3.2 mg/l

Exposure time: 72 h

EC50 (Desmodesmus subspicatus (green algae)): 11.5 mg/l

Exposure time: 72 h

Toxicity to microorganisms : EC50 (Anabaena flos-aquae (cyanobacterium)): 16.6 mg/l

Exposure time: 72 h

Persistence and degradability

**Components:** 

fluazifop-P-butyl (ISO):

Biodegradability : Result: Readily biodegradable.

Stability in water : Degradation half life (DT50): 17 d pH: 7

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Biodegradability : Result: Inherently biodegradable.

Biodegradation: 58.6 % Exposure time: 28 d

Method: OECD Test Guideline 301F

Remarks: Based on data from similar materials

Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts:

Biodegradability : Result: Not readily biodegradable.

2-ethylhexan-1-ol:

Biodegradability : Result: Readily biodegradable.

Bioaccumulative potential

**Components:** 

fluazifop-P-butyl (ISO):

Partition coefficient: n-

octanol/water

log Pow: 4.95

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Partition coefficient: n- : log Pow: 1.99 - 18.02 octanol/water : Method: QSAR

Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts:

Partition coefficient: n-

octanol/water

: log Pow: 22.1

2-ethylhexan-1-ol:

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Partition coefficient: n-

octanol/water

log Pow: 2.9 (25 °C)

Mobility in soil

Components:

fluazifop-P-butyl (ISO):

Distribution among environ-

mental compartments

Koc: 3394 ml/g, log Koc: 3.53 Remarks: Low mobility in soil

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.

**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.

Do not burn, or use a cutting torch on, the empty drum.

**SECTION 14. TRANSPORT INFORMATION** 

International Regulations

**UNRTDG** 

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(FLUAZIFOP-P-BUTYL)

Class : 9
Packing group : III
Labels : 9
Environmentally hazardous : yes

IATA-DGR

UN/ID No. : UN 3082

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

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(FLUAZIFOP-P-BUTYL)

Class : 9 Packing group : III

Labels : Miscellaneous

Packing instruction (cargo : 964

aircraft)

Packing instruction (passen- :

ger aircraft)

Environmentally hazardous : yes

**IMDG-Code** 

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

964

(FLUAZIFOP-P-BUTYL)

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

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.

#### **National Regulations**

**ADG** 

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(FLUAZIFOP-P-BUTYL)

Class : 9
Packing group : III
Labels : 9
Hazchem Code : •3Z
Environmentally hazardous : yes

Remarks : Environmentally hazardous substances meeting the descrip-

tions of UN 3077 or UN 3082 are not subject to the ADG Code when transported by road or rail in packagings that do not incorporate a receptacle exceeding 500 kg / liters, or IBCs  $\,$ 

#### 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.

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

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

Therapeutic Goods (Poisons:

Standard) Instrument

Schedule 6 (Please use the original publication to check for specific uses, specific conditions or threshold limits that might

apply for this chemical)

APVMA Code: 61355

Prohibition/Licensing Requirements

There is no applicable prohibition, authorisation and restricted use requirements, including for carcinogens referred to in Schedule 10 of the model WHS Act and Regula-

tions.

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

TCSI : On the inventory, or 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.

fluazifop-P-butyl (ISO)

ENCS : Not in compliance with the inventory

ISHL : Not in compliance with the inventory

KECI : On the inventory, or 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

### **SECTION 16: ANY OTHER RELEVANT INFORMATION**

Revision Date : 24.09.2024

Date format : dd.mm.yyyy

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

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ACGIH / TWA : 8-hour, time-weighted average

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, 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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