

SAFETY DATA SHEET



FUZILIER SELECTIVE HERBICIDE

Version 1.0 Revision Date: 17.10.2023 SDS Number: 50001558 Date of last issue: -
Date of first issue: 17.10.2023

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 Corporation

Address : 2929 WALNUT ST
PHILADELPHIA PA 19104
USA

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 (Ixon)

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 irritation : Category 2A

Carcinogenicity : Category 2

Reproductive toxicity : Category 2

Specific target organ toxicity - single exposure : Category 3 (Central nervous system)

Aspiration hazard : Category 1

GHS label elements

SAFETY DATA SHEET



FUZILIER SELECTIVE HERBICIDE

Version 1.0 Revision Date: 17.10.2023 SDS Number: 50001558 Date of last issue: -
Date of first issue: 17.10.2023

- 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 Statements : AUH066 Repeated exposure may cause skin dryness or cracking.
- 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 protection/ 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/ attention.
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 disposal plant.

SAFETY DATA SHEET



FUZILIER SELECTIVE HERBICIDE

Version 1.0 Revision Date: 17.10.2023 SDS Number: 50001558 Date of last issue: -
Date of first issue: 17.10.2023

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.; Kerosine — unspecified	64742-94-5	>= 50 -< 70
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	>= 1 -< 3
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 eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
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.
Suspected of damaging fertility or the unborn child.
Repeated exposure may cause skin dryness or cracking.

Notes to physician : Treat symptomatically.

FUZILIER SELECTIVE HERBICIDE

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	17.10.2023	50001558	Date of first issue: 17.10.2023

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 products : Fire may produce irritating, corrosive and/or toxic gases.
Fluorinated compounds
Hydrogen fluoride
Carbon oxides
Nitrogen oxides (NO_x)
Hydrogen cyanide
Chlorine compounds
- Specific extinguishing methods : 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 separately 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 emergency 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.
-

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.
-

SAFETY DATA SHEET



FUZILIER SELECTIVE HERBICIDE

Version 1.0 Revision Date: 17.10.2023 SDS Number: 50001558 Date of last issue: -
Date of first issue: 17.10.2023

- 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 application 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 storage 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 exposure)	Control parameters / Permissible concentration	Basis
Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified	64742-94-5	TWA	200 mg/m ³ (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 personal respiratory protection and protective suit.
- Hand protection
Material : Wear chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber.
- Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing

SAFETY DATA SHEET



FUZILIER SELECTIVE HERBICIDE

Version 1.0 Revision Date: 17.10.2023 SDS Number: 50001558 Date of last issue: -
Date of first issue: 17.10.2023

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

Physical state : liquid

Form : 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

Explosive properties : Not explosive

Oxidizing properties : Non-oxidizing

SAFETY DATA SHEET



FUZILIER SELECTIVE HERBICIDE

Version 1.0 Revision Date: 17.10.2023 SDS Number: 50001558 Date of last issue: -
Date of first issue: 17.10.2023

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 reactions : 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 bases

Hazardous decomposition products : Stable under recommended storage conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified due to lack of data.

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 inhalation toxicity

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

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

SAFETY DATA SHEET



FUZILIER SELECTIVE HERBICIDE

Version 1.0 Revision Date: 17.10.2023 SDS Number: 50001558 Date of last issue: -
Date of first issue: 17.10.2023

Assessment: The substance or mixture has no acute inhalation 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 inhalation 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.

Components:

fluazifop-P-butyl (ISO):

Species : Rabbit
Result : No skin irritation

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

Species : Rabbit
Result : No skin irritation

SAFETY DATA SHEET



FUZILIER SELECTIVE HERBICIDE

Version 1.0 Revision Date: 17.10.2023 SDS Number: 50001558 Date of last issue: -
Date of first issue: 17.10.2023

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

Respiratory or skin sensitisation

Skin sensitisation

Not classified due to lack of data.

Respiratory sensitisation

Not classified due to lack of data.

Components:

fluazifop-P-butyl (ISO):

Species : Guinea pig
Result : Does not cause skin sensitisation.

FUZILIER SELECTIVE HERBICIDE

Version 1.0 Revision Date: 17.10.2023 SDS Number: 50001558 Date of last issue: -
Date of first issue: 17.10.2023

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**

Not classified due to lack of data.

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)
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

SAFETY DATA SHEET



FUZILIER SELECTIVE HERBICIDE

Version 1.0 Revision Date: 17.10.2023 SDS Number: 50001558 Date of last issue: -
Date of first issue: 17.10.2023

Carcinogenicity

Suspected of causing cancer.

Components:

fluazifop-P-butyl (ISO):

Carcinogenicity - Assessment : 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 - Assessment : 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 - Assessment : Some evidence of adverse effects on development, based on animal experiments.

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

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 development : 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:

SAFETY DATA SHEET



FUZILIER SELECTIVE HERBICIDE

Version 1.0 Revision Date: 17.10.2023 SDS Number: 50001558 Date of last issue: -
Date of first issue: 17.10.2023

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 development were detected.

2-ethylhexan-1-ol:

Effects on foetal development : 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

Not classified due to lack of data.

Repeated dose toxicity

Components:

fluazifop-P-butyl (ISO):

Species : Rat
NOAEL : 1 mg/kg bw/day

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

FUZILIER SELECTIVE HERBICIDE

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	17.10.2023	50001558	Date of first issue: 17.10.2023

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.

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.

FUZILIER SELECTIVE HERBICIDE

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	17.10.2023	50001558	Date of first issue: 17.10.2023

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

Toxicity to terrestrial organisms : 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
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

SAFETY DATA SHEET



FUZILIER SELECTIVE HERBICIDE

Version 1.0 Revision Date: 17.10.2023 SDS Number: 50001558 Date of last issue: -
Date of first issue: 17.10.2023

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 mg/l
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

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

FUZILIER SELECTIVE HERBICIDE

Version 1.0 Revision Date: 17.10.2023 SDS Number: 50001558 Date of last issue: -
Date of first issue: 17.10.2023

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- : log Pow: 4.95
octanol/water

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- : log Pow: 22.1
octanol/water

2-ethylhexan-1-ol:

Partition coefficient: n- : log Pow: 2.9 (25 °C)
octanol/water

Mobility in soil**Components:****fluazifop-P-butyl (ISO):**

Distribution among environ- : Koc: 3394 ml/g, log Koc: 3.53
mental compartments Remarks: Low mobility in soil

SAFETY DATA SHEET



FUZILIER SELECTIVE HERBICIDE

Version 1.0 Revision Date: 17.10.2023 SDS Number: 50001558 Date of last issue: -
Date of first issue: 17.10.2023

Stability in soil :

Other adverse effects

Product:

Additional ecological information : 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 chemical 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

IATA-DGR

UN/ID No. : UN 3082
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.
(FLUAZIFOP-P-BUTYL)
Class : 9
Packing group : III
Labels : Miscellaneous
Packing instruction (cargo aircraft) : 964
Packing instruction (passenger aircraft) : 964
Environmentally hazardous : yes

IMDG-Code

UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

SAFETY DATA SHEET



FUZILIER SELECTIVE HERBICIDE

Version 1.0 Revision Date: 17.10.2023 SDS Number: 50001558 Date of last issue: -
Date of first issue: 17.10.2023

(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
Remarks : Environmentally hazardous substances meeting the descriptions 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.

SECTION 15. REGULATORY INFORMATION

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

Standard for the Uniform : Schedule 6
Scheduling of Medicines and
Poisons

APVMA Code: 61355

Prohibition/Licensing Requirements : There is no applicable prohibition, authorisation and restricted use

SAFETY DATA SHEET



FUZILIER SELECTIVE HERBICIDE

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	17.10.2023	50001558	Date of first issue: 17.10.2023

requirements, including for carcinogens referred to in Schedule 10 of the model WHS Act and Regulations.

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. OTHER INFORMATION

Revision Date : 17.10.2023

Date format : dd.mm.yyyy

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

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 con-

SAFETY DATA SHEET



FUZILIER SELECTIVE HERBICIDE

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	17.10.2023	50001558	Date of first issue: 17.10.2023

centration; 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

Disclaimer

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

AU / 6N