according to the Globally Harmonized System



# **AFFINITY™ 40 DF**

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### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : AFFINITY™ 40 DF

Other means of identification : KUAIMIELING 40 DF

AURORA 40 DF AFFINITY™ 40 DF

AIM 40WG SHARK™ H20

Manufacturer or supplier's details

Company : FMC India Private Limited

Address : TCG Financial Centre, 2nd Floor, C-53,

Bandra Kurla Complex,

Bandra (E), Mumbai, Maharashtra-400098

India

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

Emergency telephone : 022 6704 5504/5404

000-800-100-7141 (CHEMTREC)

Medical Emergency Number : 022 6704 5504/5404

Recommended use of the chemical and restrictions on use

Recommended use : Herbicide

Restrictions on use : Use as recommended by the label.

# 2. HAZARDS IDENTIFICATION

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

#### Classification

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

**GHS Classification** 

Short-term (acute) aquatic : Category 1

hazard

Long-term (chronic) aquatic

: Category 1

hazard

## **GHS** label elements

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Hazard pictograms

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Signal Word : Warning

Hazard Statements : H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements : Prevention:

P273 Avoid release to the environment.

Response:

P391 Collect spillage.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

Other hazards which do not result in classification

None known.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

# Components

Chemical name	CAS-No.	Concentration (%	
		w/w)	
carfentrazone-ethyl (ISO)	128639-02-1	>= 30 - < 50	
D-Glucopyranose, oligomeric, decyl octyl glyco-	68515-73-1	>= 1 - < 2.5	
sides			

#### 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

If inhaled : Remove to fresh air.

If unconscious, place in recovery position and seek medical

advice.

If experiencing any discomfort, immediately remove from exposure. Light cases: Keep person under surveillance. Get medical attention immediately if symptoms develop. Serious cases: Get medical attention immediately or call for an ambu-

lance.

In case of skin contact : If on clothes, remove clothes.

If on skin, rinse well with water.

Wash off with soap and plenty of water.

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Get medical attention if irritation develops and persists.

In case of eye contact : Flush eyes with water as a precaution.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

Do not induce vomiting without medical advice.

Most important symptoms and effects, both acute and

delayed

None known.

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

and use the recommended protective clothing

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

personal protective equipment.

Notes to physician : Treat symptomatically.

Immediate medical attention is required in case of ingestion.

#### 5. FIRE-FIGHTING MEASURES

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

Unsuitable extinguishing

media

Do not spread spilled material with high-pressure water

streams.

Specific hazards during fire

fighting

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

courses.

Hazardous combustion prod: :

ucts

Fire may produce irritating, corrosive and/or toxic gases.

Nitrogen oxides (NOx)

Carbon oxides Chlorine compounds Fluorine compounds

Specific extinguishing meth-

ods

Remove undamaged containers from fire area if it is safe to do

SO.

Use a water spray to cool fully closed containers.

Standard procedure for chemical fires.

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

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be disposed of in accordance with local regulations.

Special protective equipment:

for fire-fighters

Firefighters should wear protective clothing and self-contained

breathing apparatus.

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emer-

gency procedures

Evacuate personnel to safe areas.

Do not touch or walk through the spilled material.

If it can be safely done, stop the leak.

Ensure adequate ventilation.

Use personal protective equipment.

Avoid dust formation. Avoid breathing dust.

Never return spills in original containers for re-use.

Mark the contaminated area with signs and prevent access to

unauthorized personnel.

Only qualified personnel equipped with suitable protective

equipment may intervene.

Environmental precautions

Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

#### 7. HANDLING AND STORAGE

Advice on protection against :

fire and explosion

Normal measures for preventive fire protection.

Provide appropriate exhaust ventilation at places where dust

is formed.

Advice on safe handling : For personal protection see section 8.

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

plication area.

Avoid formation of respirable particles.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated

place.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage.

Electrical installations / working materials must comply with

the technological safety standards.

Further information on stor-

age conditions

: The product is stable under normal conditions of warehouse

storage.

Store in closed, labelled containers. The storage room should

according to the Globally Harmonized System



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be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A hand wash station should be available.

Further information on stor-

age stability

Keep in a dry place.

No decomposition if stored and applied as directed.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
carfentrazone-ethyl (ISO)	128639-02-1	TWA (Inhal- able particu- late matter)	1 mg/m3	ACGIH

## Personal protective equipment

Respiratory protection : In the case of dust or aerosol formation use respirator with an

approved filter.

Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Filter type : Particulates type

Hand protection

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

butyl rubber or nitrile rubber.

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water

Tightly fitting safety goggles

Skin and body protection : Dust impervious protective suit

Choose body protection according to the amount and concen-

tration of the dangerous substance at the work place.

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

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

structions.

Wear suitable protective equipment. When using do not eat, drink or smoke.

In the context of professional plant protection use as recommended, the end user must refer to the label and the instruc-

tions for use.

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Hygiene measures : General industrial hygiene practice.

Avoid contact with skin, eyes and clothing.

Do not breathe dust or spray mist.

Wash hands before breaks and at the end of workday.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : solid

Color : Off-white/tan

Odor : Latex smell

Odor Threshold : not determined

pH : 8.63 (23.9 °C)

Concentration: 1 %

Melting point/freezing point : not determined

Boiling point/boiling range : not determined

Flash point : not determined

Evaporation rate : not determined

Flammability (solid, gas) : Not highly flammable

Self-ignition : not determined

Upper explosion limit / Upper

flammability limit

not determined

Lower explosion limit / Lower :

flammability limit

not determined

Vapor pressure : Not available for this mixture.

Relative vapor density : not determined

Density : 0.716 g/cm3

Pour density

0.735 g/cm3 Tap density

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Solubility(ies)

Water solubility dispersible

Solubility in other solvents No data available

Partition coefficient: n-

octanol/water

Not available for this mixture.

No data available Autoignition temperature

not determined Decomposition temperature

Viscosity

Viscosity, dynamic Not applicable

Viscosity, kinematic Not applicable

Explosive properties Not explosive

Oxidizing properties Non-oxidizing

Particle size No data available

# 10. STABILITY AND REACTIVITY

Reactivity No decomposition if stored and applied as directed.

No decomposition if stored and applied as directed. Chemical stability

Possibility of hazardous reac-

tions

No decomposition if stored and applied as directed.

Dust may form explosive mixture in air.

Conditions to avoid Avoid extreme temperatures.

Avoid dust formation. Heat, flames and sparks.

Protect from frost, heat and sunlight.

Heating of the product will produce harmful and irritant va-

pours.

Incompatible materials Avoid strong acids, bases, and oxidizers.

Hazardous decomposition

products

Stable under recommended storage conditions.

## 11. TOXICOLOGICAL INFORMATION

Information on likely routes of : Inhalation

exposure

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#### **Acute toxicity**

Not classified based on available information.

**Product:** 

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

Method: OECD Test Guideline 425

Acute inhalation toxicity : LC50(Rat, male and female): > 5.18 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

Remarks: no mortality

Highest attainable concentration.

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

Method: OECD Test Guideline 402

#### **Components:**

carfentrazone-ethyl (ISO):

Acute oral toxicity : LD50 (Rat, female): 5,143 mg/kg

Method: FIFRA 81.01 Symptoms: Tremors

GLP: yes

Acute inhalation toxicity : LC50 (Rat, male and female): > 5.09 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: EPA OPP 81 - 3

Symptoms: Tremors, chromodacryorrhea, nasal discharge

GLP: yes

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Remarks: no mortality

Acute dermal toxicity : LD50 (Rat, male and female): > 4,000 mg/kg

Method: US EPA Test Guideline OPP 81-2

Assessment: The component/mixture is minimally toxic after

single contact with skin. Remarks: no mortality

D-Glucopyranose, oligomeric, decyl octyl glycosides:

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

Method: OECD Test Guideline 423

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

Method: OECD Test Guideline 402

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#### Skin corrosion/irritation

Not classified based on available information.

**Product:** 

Species : Rabbit

Method : OECD Test Guideline 404

Result : slight irritation

**Components:** 

carfentrazone-ethyl (ISO):

Species : Rabbit

Assessment : Not classified as irritant

Method : US EPA Test Guideline OPP 81-5

Result : No skin irritation

D-Glucopyranose, oligomeric, decyl octyl glycosides:

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

**Product:** 

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

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

tion.

Components:

carfentrazone-ethyl (ISO):

Species : Rabbit

Assessment : Not classified as irritant

Method : EPA OPP 81-4
Result : slight irritation

GLP : yes

D-Glucopyranose, oligomeric, decyl octyl glycosides:

Species : Rabbit

Method : OECD Test Guideline 405
Result : Irreversible effects on the eye
Remarks : Based on data from similar materials

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### Respiratory or skin sensitization

#### Skin sensitization

Not classified based on available information.

#### Respiratory sensitization

Not classified based on available information.

**Product:** 

Test Type : Local lymph node assay (LLNA)

Species : Mouse

Method : OECD Test Guideline 429

Result : Does not cause skin sensitization.

### **Components:**

## carfentrazone-ethyl (ISO):

Test Type : Local lymph node assay (LLNA)

Species : Guinea pig

Method : US EPA Test Guideline OPP 81-6
Result : Does not cause skin sensitization.

# D-Glucopyranose, oligomeric, decyl octyl glycosides:

Species : Guinea pig

Method : OECD Test Guideline 406

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

#### Germ cell mutagenicity

Not classified based on available information.

#### Components:

#### carfentrazone-ethyl (ISO):

Genotoxicity in vitro : Test Type: reverse mutation assay

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Test Type: Chromosome aberration test in vitro Test system: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Mouse (male and female)

Result: negative

Germ cell mutagenicity -

Assessment

: No genotoxic potential.

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D-Glucopyranose, oligomeric, decyl octyl glycosides:

Genotoxicity in vitro Test Type: Chromosome aberration test in vitro

Method: OECD Test Guideline 473

Result: negative

Remarks: Based on data from similar materials

Test Type: gene mutation test Method: OECD Test Guideline 476

Result: negative

Test Type: reverse mutation assay Method: OECD Test Guideline 471

Result: negative

Remarks: Based on data from similar materials

Test Type: Micronucleus test Genotoxicity in vivo

Species: Mouse (male)

Application Route: Intraperitoneal injection Method: OECD Test Guideline 474

Result: negative

Germ cell mutagenicity -

Assessment

: Weight of evidence does not support classification as a germ

cell mutagen.

#### Carcinogenicity

Not classified based on available information.

## **Components:**

## carfentrazone-ethyl (ISO):

**Species** Rat, male and female

Application Route Oral Exposure time 104 weeks

NOAEL 3 - 9 mg/kg bw/day

Result negative

Carcinogenicity - Assess-

ment

: Animal testing did not show any carcinogenic effects.

## Reproductive toxicity

Not classified based on available information.

#### **Components:**

# carfentrazone-ethyl (ISO):

Test Type: Multi-generation study Effects on fertility

> Species: Rat, male and female Application Route: Ingestion Fertility: NOEL: 4,000 ppm

Result: negative

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

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Species: Rat, female Application Route: Oral

General Toxicity Maternal: NOEL: 100 mg/kg bw/day Embryo-fetal toxicity.: NOEL: 600 mg/kg bw/day

Result: negative

Test Type: Embryo-fetal development

Species: Rabbit, female Application Route: Oral

General Toxicity Maternal: NOEL: 150 mg/kg bw/day Embryo-fetal toxicity.: NOEL: > 300 mg/kg bw/day

Result: negative

Reproductive toxicity - As-

sessment

Animal testing showed no reproductive toxicity.

# D-Glucopyranose, oligomeric, decyl octyl glycosides:

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

Species: Rat, male and female

Application Route: Oral

Dose: 0, 100, 300, 1000 mg/kg bw

General Toxicity Parent: NOAEL: 1,000 mg/kg bw/day

Method: OECD Test Guideline 421

Result: negative

Remarks: Based on data from similar materials

Effects on fetal development : Species: Rat, females

Application Route: Oral

Dose: 0, 100, 300, 1000 mg/kg bw

General Toxicity Maternal: NOAEL: 1,000 mg/kg bw/day Developmental Toxicity: NOAEL: 1,000 mg/kg bw/day

Method: OECD Test Guideline 414

Result: negative

Remarks: Based on data from similar materials

Reproductive toxicity - As-

sessment

Weight of evidence does not support classification for repro-

ductive toxicity

## STOT-single exposure

Not classified based on available information.

#### Components:

## carfentrazone-ethyl (ISO):

Remarks : No significant adverse effects were reported

### STOT-repeated exposure

Not classified based on available information.

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#### **Components:**

#### carfentrazone-ethyl (ISO):

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

organ toxicant, repeated exposure.

### D-Glucopyranose, oligomeric, decyl octyl glycosides:

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

organ toxicant, repeated exposure.

#### Repeated dose toxicity

## **Components:**

### carfentrazone-ethyl (ISO):

Species : Mouse, male and female

NOAEL : 1000 ppm LOAEL : 4000 ppm Application Route : Oral Exposure time : 90 days Target Organs : Blood

Species : Dog, male and female

NOEL : 150 mg/kg LOAEL : 500 mg/kg Application Route : Oral Exposure time : 90 days Target Organs : Blood

Species : Dog, male and female

NOEL : 50 mg/kg
NOAEL : 150 mg/kg
LOAEL : 500 mg/kg
Application Route : Oral
Exposure time : 12 months
GLP : yes
Target Organs : Blood

#### D-Glucopyranose, oligomeric, decyl octyl glycosides:

Species : Rat, male and female NOAEL : 1000 mg/kg bw/day

Application Route : Oral Exposure time : 90d

Dose : 0, 250, 500, 1000 mg/kg bw

Remarks : Based on data from similar materials

## **Aspiration toxicity**

Not classified based on available information.

## **Product:**

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

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### **Components:**

# carfentrazone-ethyl (ISO):

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

## **Neurological effects**

#### **Components:**

#### carfentrazone-ethyl (ISO):

No neurotoxicity observed in animal studies.

#### **Further information**

**Product:** 

Remarks : No data available

#### 12. ECOLOGICAL INFORMATION

## **Ecotoxicity**

**Product:** 

Toxicity to algae/aquatic

plants

: NOEC (algae): 0.0063 mg/l

Exposure time: 72 h

ErC50 (algae): 0.067 mg/l Exposure time: 72 h

NOEC (Lemna gibba (gibbous duckweed)): 0.00158 µg/l

Exposure time: 7 d

Method: OECD Test Guideline 221

EC50 (Lemna gibba (gibbous duckweed)): 0.030 μg/l

Exposure time: 7 d

Method: OECD Test Guideline 221

Toxicity to soil dwelling or-

ganisms

NOEC: 45.9 mg/kg

Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 222

LC50: > 45.9 mg/kg

Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 222

Toxicity to terrestrial organ-

isms

LD50: > 200 µg/bee Exposure time: 48 h

End point: Acute oral toxicity Species: Apis mellifera (bees) Method: OECD Test Guideline 213

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**Components:** 

carfentrazone-ethyl (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2.55 mg/l

Exposure time: 96 h
Test Type: semi-static test

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 9.8 mg/l

End point: Immobilization Exposure time: 48 h

Method: OECD Test Guideline 202

Remarks: No toxicity at the limit of solubility.

Toxicity to algae/aquatic

plants

EC50 (Anabaena flos-aquae (cyanobacterium)): 0.012 mg/l

Exposure time: 72 h

NOEC (algae): 0.001 mg/l

Exposure time: 96 h

EC50 (Lemna gibba (gibbous duckweed)): 0.0057 mg/l

Exposure time: 14 d

EC50 (Selenastrum capricornutum (green algae)): 0.0133

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

GLP: yes

NOEC (Selenastrum capricornutum (green algae)): 0.00933

mg/l

End point: Growth rate Exposure time: 72 h

Method: OECD Test Guideline 201

GLP: ves

M-Factor (Acute aquatic tox- :

icity)

10

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

Test Type: Respiration inhibition Method: OECD Test Guideline 209

GLP:

Toxicity to fish (Chronic tox-

icity)

NOEC: 22 µg/l

Exposure time: 89 d

Species: Oncorhynchus mykiss (rainbow trout)

Test Type: Early Life-Stage

Method: OECD Test Guideline 210

GLP: yes

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

NOEC: 35 mg/l

End point: reproduction

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ic toxicity) Exposure time: 21 d

Species: Daphnia

Method: US EPA Test Guideline OPPTS 850.1300

Remarks: Information given is based on data obtained from

similar product.

M-Factor (Chronic aquatic

toxicity)

100

Toxicity to soil dwelling or-

ganisms

NOEC: 820 mg/kg

Species: Eisenia fetida (earthworms)

Method: OECD Test Guideline 216

Remarks: No significant adverse effect on Nitrogen minerali-

zation.

Method: OECD Test Guideline 217

Remarks: No significant adverse effect on Carbon mineraliza-

tion.

Toxicity to terrestrial organ-

isms

LD50: > 5,620 ppm

End point: Acute oral toxicity

Species: Anas platyrhynchos (Mallard duck)

Remarks: Dietary

LD50: 2,250 mg/kg

End point: Acute oral toxicity

Species: Colinus virginianus (Bobwhite quail)

NOEL: 1000 ppm

End point: Reproduction Test

Species: Colinus virginianus (Bobwhite quail)

LD50: > 200 µg/bee

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

LD50: > 200 µg/bee

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

**Ecotoxicology Assessment** 

Toxicity Data on Soil : Harmful to the soil environment.

D-Glucopyranose, oligomeric, decyl octyl glycosides:

Toxicity to fish : LC0 (Danio rerio (zebra fish)): 59.3 mg/l

Exposure time: 96 h Test Type: semi-static test

Toxicity to daphnia and other :

aquatic invertebrates

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

Exposure time: 48 h

Method: OECD Test Guideline 202

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Toxicity to algae/aquatic

plants

EC50 (Desmodesmus subspicatus (green algae)): 21 mg/l

Exposure time: 72 h Test Type: static test

Toxicity to microorganisms : EC50 (Pseudomonas putida): > 560 mg/l

Exposure time: 6 h

Test Type: Growth inhibition

Toxicity to fish (Chronic tox-

icity)

NOEC: 1.8 mg/l Exposure time: 28 d

Species: Danio rerio (zebra fish) Method: OECD Test Guideline 204

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

LOEC: 2 mg/l

Exposure time: 21 d

Species: Daphnia magna (Water flea)

Test Type: semi-static test

Method: OECD Test Guideline 202

Remarks: Based on data from similar materials

Toxicity to soil dwelling or-

ganisms

LC0: >= 654 mg/kg Exposure time: 14 d

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

Remarks: Based on data from similar materials

#### Persistence and degradability

#### Components:

carfentrazone-ethyl (ISO):

Biodegradability : Result: Not readily biodegradable.

D-Glucopyranose, oligomeric, decyl octyl glycosides:

Biodegradability : Inoculum: activated sludge, non-adapted

Result: Readily biodegradable.

Method: OECD Test Guideline 301E

## **Bioaccumulative potential**

**Product:** 

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

#### **Components:**

carfentrazone-ethyl (ISO):

Bioaccumulation : Species: Oncorhynchus mykiss (rainbow trout)

Exposure time: 28 d

Bioconcentration factor (BCF): 176

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Method: OECD Test Guideline 305E Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-

octanol/water

log Pow: 3.7 (20 °C)

D-Glucopyranose, oligomeric, decyl octyl glycosides:

Partition coefficient: n- : log Pow: 1.72 (40 °C)

octanol/water pH: 6.5

Remarks: Based on data from similar materials

Mobility in soil

**Product:** 

Distribution among environ-

mental compartments

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

**Components:** 

carfentrazone-ethyl (ISO):

Distribution among environ-

mental compartments

: Remarks: Mobile in soils

Other adverse effects

**Product:** 

Additional ecological infor-

mation

An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Very toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

**Disposal methods** 

Waste from residues : The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.

Do not re-use empty containers.

Packaging that is not properly emptied must be disposed of as

the unused product.

Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

according to the Globally Harmonized System



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#### 14. TRANSPORT INFORMATION

### **International Regulations**

**UNRTDG** 

UN number : UN 3077

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Carfentrazone-ethyl)

Class : 9

Subsidiary risk : ENVIRONM.

Packing group : III

Labels : 9 (ENVIRONM.)

Environmentally hazardous : yes

IATA-DGR

UN/ID No. : UN 3077

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

(Carfentrazone-ethyl)

Class : 9 Packing group : III

Labels : Miscellaneous

Packing instruction (cargo : 956

aircraft)

Packing instruction (passen-

ger aircraft)

: 956

Environmentally hazardous : yes

**IMDG-Code** 

UN number : UN 3077

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Carfentrazone-ethyl)

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

Marine pollutant : yes

## Transport in bulk according to IMO instruments

Not applicable for product as supplied.

# Special precautions for user

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

### 15. REGULATORY INFORMATION

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

according to the Globally Harmonized System



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The ingredients 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.

ETHYL (RS)-2-CHLORO-3-{2-CHLORO-5-[4-

(DIFLUOROMETHYL)-4,5-DIHYDRO-3-METHYL-5-OXO-1H-1,2,4-TRIAZOL-1-YL]-4-FLUOROPHENYL}PROPIONATE

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 : On the inventory, or in compliance with the inventory

NZIoC : Not in compliance with the inventory

TECI: Not in compliance with the inventory

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

Revision Date : 29.04.2024

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 concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemi-

according to the Globally Harmonized System



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cal 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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