according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

1.0 2024/06/14 50001978 Date of first issue: 2024/06/14

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : MAIHUXI 9SE

Recommended use of the chemical and restrictions on use

Recommended use : Herbicide

Restrictions on use : Use as recommended by the label.

Manufacturer or supplier's details

Company : FMC (Suzhou) Crop care co., ltd

Address : 99 Jiepu Road, Suzhou Industrial Park, Jiang Su, China

215126 China

Telephone : 0512-62863988

Telefax : 0512-62863900

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

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

0086-0532 8388 9090 (National Registration Center for Chemi-

cals)

Medical emergency: 86 532 8388 9090

### 2. HAZARDS IDENTIFICATION

### **Emergency Overview**

Appearance: liquidColor: whiteOdor: odorless

May be harmful in contact with skin. Suspected of causing cancer. Very toxic to aquatic life with long lasting effects.

**GHS Classification** 

Acute toxicity (Dermal) : Category 5

Carcinogenicity : Category 2

Short-term (acute) aquatic

hazard

Category 1

according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

1.0 2024/06/14 50001978 Date of first issue: 2024/06/14

Long-term (chronic) aquatic

hazard

Category 1

**GHS** label elements

Hazard pictograms





Signal Word : WARNING

Hazard Statements : H313 May be harmful in contact with skin.

H351 Suspected of causing cancer.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements : Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read

and understood.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protec-

tion/ face protection.

Response:

P312 Call a POISON CENTER/ doctor if you feel unwell.

P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

Physical and chemical hazards

Not classified based on available information.

**Health hazards** 

May be harmful in contact with skin. Suspected of causing cancer.

**Environmental hazards** 

Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Other hazards which do not result in classification

None known.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

	04041	0 ' ' ' (0/ / )
Chemical name	LCAS-No.	Concentration (% w/w)

according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

1.0 2024/06/14 50001978 Date of first issue: 2024/06/14

carfentrazone-ethyl (ISO)	128639-02-1	>= 2.5 -< 10
florasulam (ISO)	145701-23-1	>= 2.5 -< 10
Solvent naphtha (petroleum), heavy arom.;	64742-94-5	>= 10 -< 20
Kerosine — unspecified		

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 : If unconscious, place in recovery position and seek medical

advice

If symptoms persist, call a physician.

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 : 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 : Induce vomiting immediately and call a physician.

Keep respiratory tract clear.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician. Take victim immediately to hospital.

Most important symptoms and effects, both acute and

delayed

May be harmful in contact with skin.

Suspected of causing cancer.

Notes to physician : Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Dry chemical

Carbon dioxide (CO2)

Water spray 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

ting courses.

3 3

Courses.

Hazardous combustion prod: :

ucts

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

Nitrogen oxides (NOx)

according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

2024/06/14 50001978 Date of first issue: 2024/06/14 1.0

> Carbon oxides Chlorine compounds Fluorine compounds Hydrogen cyanide Hydrogen chloride Sulfur oxides

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.

Special protective equipment :

for fire-fighters

Firefighters should wear protective clothing and self-contained

breathing apparatus.

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- :

tive equipment and emergency procedures

Use personal protective equipment.

Ensure adequate ventilation. Evacuate personnel to safe areas.

Prevent product from entering drains. **Environmental precautions** 

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

Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

### 7. HANDLING AND STORAGE

Handling

Advice on protection against

fire and explosion

Normal measures for preventive fire protection.

Advice on safe handling Do not breathe vapors/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.

Dispose of rinse water in accordance with local and national

regulations.

Strong acids and strong bases Avoidance of contact

Strong oxidizing agents

Storage

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

place.

according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

2024/06/14 50001978 Date of first issue: 2024/06/14 1.0

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.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Ingredients with workplace control parameters

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

Personal protective equipment

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

sonal respiratory protection and protective suit.

Eye/face protection Eye wash bottle with pure water

Tightly fitting safety goggles

Skin and body protection Impervious clothing

Choose body protection according to the amount and con-

centration of the dangerous substance at the work place.

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.

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

When using do not eat or drink. Hygiene measures

When using do not smoke.

Wash hands before breaks and at the end of workday.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state liquid

Form liquid

Color white

according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

1.0 2024/06/14 50001978 Date of first issue: 2024/06/14

Odor : odorless

pH : No data available

Melting point/freezing point : No data available

Boiling point/boiling range : No data available

Flash point :  $> 100 \, ^{\circ}\text{C}$ 

Flammability (solid, gas) : Not applicable

Self-ignition : No data available

Density : 1.043 g/cm3 (20 °C)

Solubility(ies)

Water solubility : No data available

Partition coefficient: n-

octanol/water

Not applicable

Viscosity

Viscosity, dynamic : 188 mPa.s ( 20 °C)

Explosive properties : Not explosive

Oxidizing properties : Non-oxidizing

Particle size : Not applicable

# 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.

Conditions to avoid : Protect from frost, heat and sunlight.

Incompatible materials : Strong acids and strong bases

Strong oxidizing agents

Hazardous decomposition : No hazardous decomposition products are known.

according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

1.0 2024/06/14 50001978 Date of first issue: 2024/06/14

products

#### 11. TOXICOLOGICAL INFORMATION

#### **Acute toxicity**

May be harmful in contact with skin.

**Product:** 

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

Acute inhalation toxicity : LC50 (Rat, male and female): > 2.06 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 (Rat, male and female): > 2,000 mg/kg

**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

florasulam (ISO):

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

Method: OECD Test Guideline 425

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

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

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

according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

1.0 2024/06/14 50001978 Date of first issue: 2024/06/14

Method: OECD Test Guideline 402

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): > 4.778 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, 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

#### Skin corrosion/irritation

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

**Product:** 

Species : Rabbit

Result : No skin irritation

#### Components:

### carfentrazone-ethyl (ISO):

Species : Rabbit

Assessment : Not classified as irritant

Method : US EPA Test Guideline OPP 81-5

Result : No skin irritation

florasulam (ISO):

Method : OECD Test Guideline 404

Result : No skin irritation

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

Species : Rabbit

Result : No skin irritation

# Serious eye damage/eye irritation

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

**Product:** 

Species : Rabbit

Result : No eye irritation

according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

1.0 2024/06/14 50001978 Date of first issue: 2024/06/14

#### Components:

carfentrazone-ethyl (ISO):

Species : Rabbit
Result : slight irritation

Assessment : Not classified as irritant

Method : EPA OPP 81-4

GLP : yes

florasulam (ISO):

Result : No eye irritation

Method : OECD Test Guideline 405

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

Species : Rabbit

Result : No eye irritation

Remarks : Based on data from similar materials

# Respiratory or skin sensitization

### Skin sensitization

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

### Respiratory sensitization

Not classified due to lack of data.

**Product:** 

Species : Guinea pig

Result : Not a skin sensitizer.

### **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.

florasulam (ISO):

Method : OECD Test Guideline 429

Result : Does not cause skin sensitization.

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

Test Type : Maximization Test

Species : Guinea pig

Result : Not a skin sensitizer.

Remarks : Based on data from similar materials

# Germ cell mutagenicity

Not classified due to lack of data.

according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

1.0 2024/06/14 50001978 Date of first issue: 2024/06/14

**Product:** 

Germ cell mutagenicity -

Assessment

: Contains no ingredient listed as a mutagen

**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.

florasulam (ISO):

Genotoxicity in vitro : Test system: Chinese hamster ovary cells

Method: Regulation (EC) No. 440/2008, Annex, B.17

Result: negative

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

Genotoxicity in vitro : Test Type: reverse mutation assay

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Remarks: Based on data from similar materials

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

Metabolic activation: with and without metabolic activation

Result: negative

Remarks: Based on data from similar materials

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Mouse

Application Route: Ingestion

Result: negative

Carcinogenicity

Suspected of causing cancer.

**Product:** 

according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

1.0 2024/06/14 50001978 Date of first issue: 2024/06/14

Carcinogenicity - Assess-

ment

: Contains no ingredient listed as a carcinogen

### **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.

florasulam (ISO):

Carcinogenicity - Assess-

ment

: Animal testing did not show any carcinogenic effects.

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

Carcinogenicity - Assess-

ment

: Limited evidence of carcinogenicity in animal studies

#### Reproductive toxicity

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

**Product:** 

Reproductive toxicity - As-

sessment

Contains no ingredient listed as toxic to reproduction

# **Components:**

### carfentrazone-ethyl (ISO):

Effects on fertility : Test Type: Multi-generation study

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

Result: negative

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

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

according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

1.0 2024/06/14 50001978 Date of first issue: 2024/06/14

Result: negative

Reproductive toxicity - As-

sessment

Animal testing showed no reproductive toxicity.

florasulam (ISO):

Reproductive toxicity - As-

sessment

: No evidence of adverse effects on sexual function and fertility,

or on development, based on animal experiments.

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

Effects on fertility : Test Type: Three-generation study

Species: Rat, male and female Application Route: Inhalation

Result: negative

Effects on fetal development : Test Type: Pre-natal

Species: Rat

Application Route: Ingestion Symptoms: Maternal effects. Method: OECD Test Guideline 414

Result: negative

STOT-single exposure

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

**Product:** 

Remarks : No significant adverse effects were reported

**Components:** 

carfentrazone-ethyl (ISO):

Remarks : No significant adverse effects were reported

florasulam (ISO):

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

organ toxicant, single exposure.

STOT-repeated exposure

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

**Product:** 

Remarks : No data available

**Components:** 

carfentrazone-ethyl (ISO):

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

organ toxicant, repeated exposure.

according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

1.0 2024/06/14 50001978 Date of first issue: 2024/06/14

florasulam (ISO):

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

organ toxicant, repeated exposure.

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

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

florasulam (ISO):

Species : Rat
LOAEL : 500 mg/kg
Exposure time : 90 day
Symptoms : kidney effects

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

Species : Rat

NOAEL : 300 mg/kg
Application Route : Oral - gavage
Exposure time : 13 weeks
Remarks : mortality

**Aspiration toxicity** 

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

according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

1.0 2024/06/14 50001978 Date of first issue: 2024/06/14

#### **Product:**

No aspiration toxicity classification

### **Components:**

## carfentrazone-ethyl (ISO):

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

## florasulam (ISO):

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

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

May be fatal if swallowed and enters airways.

#### **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 fish : LC50 (Fish): > 1.7 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia): 1.7 mg/l Exposure time: 48 h

Toxicity to algae/aquatic : EC50 (algae): 0.0874 mg/l

plants

Exposure time: 72 h

Toxicity to soil dwelling or-

ganisms

LC50 (Eisenia fetida (earthworms)): 41.4 mg/kg dry weight

(d.w.)

Exposure time: 14 d

Toxicity to terrestrial organ-

isms

LD50 (Birds): > 1,000 mg/kg

Exposure time: 7 d

LD50 (Apis mellifera (bees)): > 30 µg/bee

Exposure time: 48 h Remarks: Contact

according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

1.0 2024/06/14 50001978 Date of first issue: 2024/06/14

LD50 (Apis mellifera (bees)): > 2000 μg/bee

Exposure time: 48 h Remarks: Oral

**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: yes

M-Factor (Acute aquatic tox-

icity)

10

Toxicity to fish (Chronic tox-

icity)

NOEC (Oncorhynchus mykiss (rainbow trout)): 22 µg/l

Exposure time: 89 d Test Type: Early Life-Stage

Method: OECD Test Guideline 210

GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia): 35 mg/l End point: reproduction

Exposure time: 21 d

Method: US EPA Test Guideline OPPTS 850.1300

according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

1.0 2024/06/14 50001978 Date of first issue: 2024/06/14

Remarks: Information given is based on data obtained from

similar product.

M-Factor (Chronic aquatic

toxicity)

100

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

Test Type: Respiration inhibition Method: OECD Test Guideline 209

Toxicity to soil dwelling or-

ganisms

NOEC (Eisenia fetida (earthworms)): 820 mg/kg

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

End point: Acute oral toxicity

Remarks: Dietary

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

End point: Acute oral toxicity

NOEL (Colinus virginianus (Bobwhite quail)): 1000 ppm

End point: Reproduction Test

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

End point: Acute oral toxicity

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

End point: Acute contact toxicity

**Ecotoxicology Assessment** 

Toxicity Data on Soil : Harmful to the soil environment.

florasulam (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 292 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)):

0.00894 mg/l

Exposure time: 72 h

EC50 (Lemna gibba (gibbous duckweed)): 0.00118 mg/l

Exposure time: 72 h

according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

100

2024/06/14 50001978 Date of first issue: 2024/06/14 1.0

M-Factor (Acute aquatic tox-

icity)

Toxicity to fish (Chronic tox-

icity)

NOEC (Oncorhynchus mykiss (rainbow trout)): 119 mg/l

Exposure time: 28 d

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 38.9 mg/l

Exposure time: 21 d

M-Factor (Chronic aquatic

toxicity)

100

Toxicity to soil dwelling or-

ganisms

LC50 (Eisenia fetida (earthworms)): > 1,320 mg/kg

Toxicity to terrestrial organ-

isms

LD50 (Anas platyrhynchos (Mallard duck)): > 5,000 mg/kg

End point: Acute contact toxicity

LD50 (Apis mellifera (bees)): >100

End point: Acute oral toxicity

LD50 (Apis mellifera (bees)): >100 End point: Acute contact toxicity

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

LL50 (Oncorhynchus mykiss (rainbow trout)): 3 mg/l Toxicity to fish

> Exposure time: 96 h Method: EPA OPP 72-1

Toxicity to daphnia and other :

aquatic invertebrates

EL50 (Daphnia magna (Water flea)): 1.1 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

NOELR (Pseudokirchneriella subcapitata (green algae)): 0.22

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

EL50 (Pseudokirchneriella subcapitata (green algae)): 7.9

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to fish (Chronic tox-

icity)

NOELR (Oncorhynchus mykiss (rainbow trout)): 0.103 mg/l

Exposure time: 28 d

Method: QSAR

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOELR (Daphnia magna (Water flea)): 0.18 mg/l

Exposure time: 21 d

Method: QSAR

according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

1.0 2024/06/14 50001978 Date of first issue: 2024/06/14

Persistence and degradability

**Components:** 

carfentrazone-ethyl (ISO):

Biodegradability : Result: Not readily biodegradable.

florasulam (ISO):

Biodegradability : Result: Not readily biodegradable.

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

Biodegradability : Result: Not readily biodegradable.

Biodegradation: 60.74 % Exposure time: 28 d

Method: OECD Test Guideline 301F

**Bioaccumulative potential** 

**Components:** 

carfentrazone-ethyl (ISO):

Bioaccumulation : Species: Oncorhynchus mykiss (rainbow trout)

Bioconcentration factor (BCF): 176

Exposure time: 28 d

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

Partition coefficient: n-

octanol/water

log Pow: 3.7 (20 °C)

florasulam (ISO):

Bioaccumulation : Bioconcentration factor (BCF): < 2.21

Remarks: Does not bioaccumulate.

Partition coefficient: n-

octanol/water

log Pow: -1.1 (25 °C)

pH: 7

log Pow: 1.11 (25 °C)

pH: 3

log Pow: -1.79 (25 °C)

pH: 10

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

Partition coefficient: n- : log Pow: 3.17 - 5.6 octanol/water : Method: QSAR

according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

1.0 2024/06/14 50001978 Date of first issue: 2024/06/14

## Mobility in soil

## **Components:**

carfentrazone-ethyl (ISO):

Distribution among environ-

mental compartments

Remarks: Mobile in soils

florasulam (ISO):

Distribution among environ-

mental compartments

Koc: 22 ml/g, log Koc: 1.34 Remarks: Highly mobile in soils

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.

### 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.

#### 14. TRANSPORT INFORMATION

### International Regulations

**UNRTDG** 

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Carfentrazone-ethyl, Florasulam)

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.

according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

2024/06/14 50001978 Date of first issue: 2024/06/14 1.0

(Carfentrazone-ethyl, Florasulam)

Class Packing group Ш

Labels Miscellaneous

Packing instruction (cargo 964

aircraft)

Packing instruction (passen-964

ger aircraft)

Environmentally hazardous yes

**IMDG-Code** 

**UN** number UN 3082

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

yes

(Carfentrazone-ethyl, Florasulam)

Class 9 Packing group Ш 9 Labels F-A, S-F EmS Code Marine pollutant

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

Not applicable for product as supplied.

#### **Domestic regulation**

GB 6944/12268

UN 3082 UN number

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Carfentrazone-ethyl, Florasulam)

Class 9 Ш Packing group Labels 9 Marine pollutant yes

### Special precautions for user

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

### 15. REGULATORY INFORMATION

### National regulatory information

Law on the Prevention and Control of Occupational Diseases

### **Yangtze River Protection Law**

This product does not contain any dangerous chemicals prohibited for inland river transport.

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

**TCSI** Not in compliance with the inventory

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

according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

1.0 2024/06/14 50001978 Date of first issue: 2024/06/14

AIIC : Not in compliance with the inventory

DSL : This product contains the following components that are not

on the Canadian DSL nor NDSL.

Polyalkylene oxide block copolymer

carfentrazone-ethyl (ISO) Polyethylene glycol polyester

florasulam (ISO)

Poly(oxy-1,2-ethanediyl),  $\alpha$ -[2,4,6-tris(1-phenylethyl)phenyl]-

ω-hydroxy-, phosphate, potassium salt

Smectite-group minerals

ENCS : Not in compliance with the inventory

ISHL : Not in compliance with the inventory

KECI : Not in compliance with the inventory

PICCS : Not in compliance with the inventory

IECSC : Not in compliance with the inventory

NZIoC : Not in compliance with the inventory

TECI: Not in compliance with the inventory

### **16. OTHER INFORMATION**

Revision Date : 2024/06/14

Date format : yyyy/mm/dd

#### 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 Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Or-

according to GB/T 16483 and GB/T 17519



## **MAIHUXI 9SE**

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

1.0 2024/06/14 50001978 Date of first issue: 2024/06/14

ganisation 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 insure 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.

CN / EN