according to GB/T 16483 and GB/T 17519



DOMINEX 50 SC

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name : DOMINEX 50 SC

Recommended use of the chemical and restrictions on use

Recommended use : Can be used as insecticide only.

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, SIP Suzhou, Jiangsu, PRC,

215126

Telephone : (0086) 0512-62863988

Telefax : (0086) 0512-62862333

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: viscous liquidColor: white, light tanOdor: odorless

May be harmful if swallowed. Harmful if inhaled. Very toxic to aquatic life with long lasting effects.

GHS Classification

Acute toxicity (Oral) : Category 5

Acute toxicity (Inhalation) : Category 4

Short-term (acute) aquatic

hazard

: Category 1

Long-term (chronic) aquatic

hazard

Category 1

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GHS label elements

Hazard pictograms





Signal Word : Warning

Hazard Statements : H303 May be harmful if swallowed.

H332 Harmful if inhaled.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements : Prevention:

P261 Avoid breathing mist or vapors.

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

P273 Avoid release to the environment.

Response:

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

doctor if you feel unwell.

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

P391 Collect spillage.

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 if swallowed. Harmful if inhaled.

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

Chemical name	CAS-No.	Concentration (% w/w)
α-cypermethrin (ISO)	67375-30-8	>= 4.5 -<= 5.5

4. FIRST AID MEASURES

according to GB/T 16483 and GB/T 17519



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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 : Consult a physician after significant exposure.

If unconscious, place in recovery position and seek medical

advice.

In case of skin contact : Wash off with soap and water.

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 : 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 if swallowed.

Harmful if inhaled.

Notes to physician : Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Dry chemical

Water spray

Carbon dioxide (CO2)

Foam

Unsuitable extinguishing

media

High volume water jet

Specific hazards during fire

fighting

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

courses.

Hazardous combustion prod: :

ucts

Carbon oxides

Nitrogen oxides (NOx) Chlorine compounds

Specific extinguishing meth-

ods

Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

Special protective equipment : Wear self-contained breathing apparatus for firefighting if nec-

according to GB/T 16483 and GB/T 17519



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for fire-fighters essary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- :

tive 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

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 Avoid formation of aerosol.

Do not breathe vapors/dust.

For personal protection see section 8.

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

plication area.

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

regulations.

Avoidance of contact Strong oxidizing agents

Strong acids and strong bases

Storage

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

Containers which are opened must be carefully resealed and

kept upright to prevent leakage.

Electrical installations / working materials must comply with

the technological safety standards.

Further information on stor-

age stability

No decomposition if stored and applied as directed.

according to GB/T 16483 and GB/T 17519



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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

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.

Hygiene measures : When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Form : viscous liquid

Color : white, light tan

Odor : odorless

pH : 4.5 - 6.5

(1% solution in water)

Flash point : Not applicable

Relative density : 1.01 - 1.03 (20 °C)

Solubility(ies)

Water solubility : dispersible

Partition coefficient: n- : Not applicable

according to GB/T 16483 and GB/T 17519



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octanol/water

Viscosity

Viscosity, dynamic : 1,700 - 3,200 mPa.s

Explosive properties : Not explosive

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 oxidizing agents

Strong acids and strong bases

Hazardous decomposition

products

Stable under recommended storage conditions.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

May be harmful if swallowed.

Harmful if inhaled.

Product:

Acute oral toxicity : LD50 (Rat, female): 3,184 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 1.9 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Remarks: Based on data from similar materials

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

Assessment: The substance or mixture has no acute dermal

toxicity

Components:

α-cypermethrin (ISO):

Acute oral toxicity : LD50 (Rat, male): 274 mg/kg

LD50 (Rat): 57 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 0.32 mg/l

Exposure time: 4 h

according to GB/T 16483 and GB/T 17519



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Test atmosphere: dust/mist

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Remarks: Highest attainable concentration.

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

Skin corrosion/irritation

Not classified based on available information.

Product:

Species : Rabbit

Result : No skin irritation

Remarks : Based on data from similar materials

Components:

α-cypermethrin (ISO):

Species : Rabbit

Result : No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Species : Rabbit

Result : No eye irritation

Method : OECD Test Guideline 405

Remarks : Based on data from similar materials

Components:

α-cypermethrin (ISO):

Species : Rabbit Result : slight irritation

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Product:

Routes of exposure : Skin contact Species : Guinea pig

Result : Not a skin sensitizer.

Remarks : Based on data from similar materials

according to GB/T 16483 and GB/T 17519



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Components:

α-cypermethrin (ISO):

Test Type : Magnussen-Kligman test

Species : Guinea pig

Result : Not a skin sensitizer.

Germ cell mutagenicity

Not classified based on available information.

Components:

α-cypermethrin (ISO):

Genotoxicity in vitro : Test Type: gene mutation test

Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test

Result: negative

Test Type: chromosome aberration assay

Result: negative

Carcinogenicity

Not classified based on available information.

Components:

α-cypermethrin (ISO):

Species: MouseApplication Route: OralExposure time: 78 weeksNOAEL: 3 mg/kg bw/day

Result : negative

Reproductive toxicity

Not classified based on available information.

Components:

α-cypermethrin (ISO):

Reproductive toxicity - As- : Animal testing showed no reproductive toxicity.

sessment

STOT-single exposure

Not classified based on available information.

Components:

α-cypermethrin (ISO):

Assessment : May cause respiratory irritation.

according to GB/T 16483 and GB/T 17519



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STOT-repeated exposure

Not classified based on available information.

Components:

α-cypermethrin (ISO):

Target Organs Central nervous system

The substance or mixture is classified as specific target organ Assessment

toxicant, repeated exposure, category 2.

Repeated dose toxicity

Components:

α-cypermethrin (ISO):

Species Dog

NOAEL 3.5 mg/kg bw/day : Oral - feed Application Route Exposure time : 13 weeks

Target Organs : Central nervous system

Aspiration toxicity

Not classified based on available information.

Further information

Product:

No data available Remarks

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

α-cypermethrin (ISO):

Toxicity to fish LC50 (Fish): 0.0028 mg/l

Exposure time: 96 h

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Crustaceans): 0.0003 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

EC50 (algae): 0.1 mg/l Exposure time: 72 h

M-Factor (Acute aquatic tox- :

icity)

1,000

Toxicity to fish (Chronic tox-

icity)

NOEC (Fish): 0.00003 mg/l

Exposure time: 21 d

according to GB/T 16483 and GB/T 17519



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Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC (Crustaceans): 0.00003 mg/l

Exposure time: 21 d

M-Factor (Chronic aquatic

toxicity)

1,000

Toxicity to soil dwelling or-

ganisms

LC50 (Eisenia fetida (earthworms)): > 100 mg/kg

Toxicity to terrestrial organ-

isms

LD50 (Apis mellifera (bees)): 0.059 µg/bee

Remarks: Oral

LD50 (Apis mellifera (bees)): 0.033 µg/bee

Remarks: Contact

Persistence and degradability

Components:

α-cypermethrin (ISO):

Biodegradability : Result: Not readily biodegradable.

Bioaccumulative potential

Components:

α-cypermethrin (ISO):

Partition coefficient: n-

octanol/water

log Pow: 5.5 (20 °C)

Mobility in soil

No data available

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.

according to GB/T 16483 and GB/T 17519



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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.

(.alpha.-Cypermethrin)

Class : 9
Packing group : III
Labels : 9

IATA-DGR

UN/ID No. : UN 3082

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

(.alpha.-Cypermethrin)

Class : 9 Packing group : III

Labels : Miscellaneous

Packing instruction (cargo

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.

964

(.alpha.-Cypermethrin)

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

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 number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(.alpha.-Cypermethrin)

Class : 9
Packing group : III
Labels : 9

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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

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.

AIIC : Not in compliance with the inventory

DSL : This product contains the following components that are not

on the Canadian DSL nor NDSL.

 α -cypermethrin (ISO)

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 : 2023/07/13

Date format : yyyy/mm/dd

Full text of other abbreviations

according to GB/T 16483 and GB/T 17519



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AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China: IMDG - International Maritime Dangerous Goods: IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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