

## FLORAMITE® SC

EPA Registration Number: 400-508-59807

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name** . . . . .: FLORAMITE® SC  
**EPA Registration No.** . . . . .: 400-508-59807  
**Chemical nature** . . . . .: Miticide  
**Recommended use of the chemical and restrictions on use**  
**Recommended use** . . . . .: Plant protection agent  
**Restrictions on use** . . . . .: Agriculture,  
 For professional users only.  
**Company information** . . . . .: OHP, Inc.  
 PO Box 51230  
 Mainland, PA 19451  
 (800) 659-6745

**Emergency telephone number**

#### TRANSPORTATION EMERGENCY

**(24 hours a day) call** . . . . .: Chemtec: 1-800-424-9300

**MEDICAL EMERGENCY (24 hours a day) and Product Information call** . . . . .: 1-800-356-4647

**SDS Information or**

**Request** . . . . .: ohp.com

### 2. HAZARDS IDENTIFICATION

**Emergency Overview**

#### WARNING!

**Appearance** . . . . .: liquid  
**Colour** . . . . .: off-white, to, tan  
**Odour** . . . . .: slight, sweet  
**Hazard Summary** . . . . .: May cause an allergic skin reaction.  
 Toxic to aquatic life with long lasting effects.

**OSHA Regulatory status** . . . . .: This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

**GHS Classification**

**Skin sensitisation** . . . . .: Category 1  
**Acute aquatic toxicity** . . . . .: Category 2  
**Chronic aquatic toxicity** . . . . .: Category 2

**GHS Label element**

**Hazard pictograms:**



**Signal word** . . . . .: Warning

**Hazard statements**

H317 May cause an allergic skin reaction.  
 H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements:**

**Prevention:**

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
 P272 Contaminated work clothing should not be allowed out of the workplace.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves.

**Response:**

P302 + IF ON SKIN: Wash with plenty of soap and water.  
 P333 + If skin irritation or rash occurs: Get medical advice/ attention.  
 P363 Wash contaminated clothing before reuse.  
 P391 Collect spillage.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

**Potential Health Effects**

**Skin** . . . . .: May cause allergic skin reaction.

**Aggravated Medical Condition** . . . . .: None known.

**Symptoms of Overexposure** . . . . .: sensitising effects

**Carcinogenicity:**

**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

## FLORAMITE® SC

EPA Registration Number: 400-508-59807

### NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture . . . . . : Mixture

Chemical nature . . . . . : Miticide

#### Hazardous components

Chemical Name	CAS-No.	Concentration (%)
Bifenazate	149877-41-8	>= 20 - < 30

### 4. FIRST AID MEASURES

If inhaled . . . . . : Call a POISON CENTER or doctor/ physician.

In case of skin contact . . . . . : Remove contaminated clothing and shoes.  
Call a POISON CENTER or doctor/ physician.

In case of eye contact . . . . . : Call a POISON CENTER or doctor/ physician.

If swallowed . . . . . : Call a physician or poison control center immediately.  
Do not induce vomiting without medical advice.

Notes to physician . . . . . : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

### 5. FIREFIGHTING MEASURES

Suitable extinguishing media . . . . . : Extinguishing media - large fires  
Alcohol-resistant foam (on small fires)  
Carbon dioxide (CO2)  
Dry chemical

Unsuitable extinguishing media . . . . . : Water spray jet

Specific hazards during fire-fighting . . . . . : No information available.

Specific extinguishing methods . . . . . : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information . . . . . : Prevent fire extinguishing water from contaminating surface water or the ground water system.

### Special protective equipment

for firefighters . . . . . : In the event of fire, wear self-contained breathing apparatus.  
Complete suit protecting against chemicals  
Full protective flameproof clothing

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures . . . . . : Wear suitable protective equipment.  
Avoid contact with skin and eyes.

Environmental precautions . . . . . : Do not allow material to contaminate ground water system.

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.  
Dam up.  
Large spills should be collected mechanically (remove by pumping) for disposal.  
In accordance with local and national regulations.

### 7. HANDLING AND STORAGE

Advice on safe handling . . . . . : Avoid inhalation, ingestion and contact with skin and eyes.  
Use only in area provided with appropriate exhaust ventilation.  
Wash thoroughly after handling.

Conditions for safe storage . . . . . : Keep in a dry, cool place.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters  
Contains no substances with occupational exposure limit values.

Engineering measures . . . . . : effective ventilation in all processing areas  
Ensure that eyewash stations and safety showers are close to the workstation location.

**FLORAMITE® SC**

**EPA Registration Number: 400-508-59807**

**Personal protective equipment**

**Respiratory protection** . . . : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**Hand protection**

**Remarks** . . . . . : Impervious gloves

**Eye protection** . . . . . : Safety glasses with side-shields

**Skin and body protection** . . : impervious clothing

**Hygiene measures** . . . . . : Ensure adequate ventilation, especially in confined areas.  
Remove and wash contaminated clothing before re-use.  
Handle in accordance with good industrial hygiene and safety practice.  
Wash hands before breaks and immediately after handling the product.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance** . . . . . : liquid  
**Colour** . . . . . : off-white, to, tan  
**Odour** . . . . . : slight, sweet  
**Odour Threshold** . . . . . : No data available  
**pH** . . . . . : 5 - 9  
**Melting point/range** . . . . . : Not applicable  
**Boiling point/boiling range** . . . . . : > 100 °C  
**Flash point** . . . . . : does not flash  
**Evaporation rate** . . . . . : No data available  
**Upper explosion limit** . . . . . : Not explosive  
**Lower explosion limit** . . . . . : Not explosive  
**Vapour pressure** . . . . . : No data available  
**Relative vapour density** . . . . : No data available  
**Relative density** . . . . . : 1.050 - 1.070 (25 °C)  
**Density** . . . . . : > 1 g/cm<sup>3</sup>  
**Solubility(ies)**  
**Water solubility** . . . . . : dispersible  
**Solubility in other solvents** . . . . . : Description: miscible with most organic solvents  
**Partition coefficient: n-octanol/water** . . . . . : No data available

**Auto-ignition temperature** . . : > 399 °C

**Decomposition temperature** . . . . . : No data available

**Viscosity**

**Viscosity, dynamic** . . . . . : 300 - 700 mPa.s (20 °C)  
**Viscosity, kinematic** . . . . . : No data available

**Explosive properties** . . . . . : Not explosive

**Self-Accelerating decomposition temperature (SADT)** . . . . . : Method: No information available.

**Surface tension** . . . . . : 42.1 mN/m, 25 °C

**Oxidising potential** . . . . . : The substance or mixture is not classified as oxidizing.

**10. STABILITY AND REACTIVITY**

**Reactivity** . . . . . : No dangerous reaction known under conditions of normal use.

**Chemical stability** . . . . . : Stable under normal conditions.

**Possibility of hazardous reactions** . . . . . : Hazardous polymerisation does not occur.

**Conditions to avoid** . . . . . : Extremes of temperature and direct sunlight.

**Incompatible materials** . . . . : Oxidizing agents

**Hazardous decomposition products** . . . . . : Carbon oxides  
Nitrogen oxides (NO<sub>x</sub>)

**11. TOXICOLOGICAL INFORMATION**

**Acute toxicity**

**Product:**

**Acute oral toxicity** . . . . . : LD50 (Rat, male):  
> 5,000 mg/kg  
GLP: yes  
LD50 (Rat, female):  
> 2,000 mg/kg  
GLP: yes

**Acute inhalation toxicity** : LC50 (Rat): > 1.94 mg/l  
Exposure time: 4 h  
Test atmosphere:  
dust/mist  
GLP: yes

**FLORAMITE® SC**

**EPA Registration Number: 400-508-59807**

Assessment: The substance or mixture has no acute inhalation toxicity  
Remarks: An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration.

**Acute dermal toxicity** . . . . : LD50 Dermal (Rabbit):  
> 5,000 mg/kg  
GLP: yes

**Components:**

**Bifenazate:**

**Acute oral toxicity** . . . . : LD50 (Rat, male and female): > 5,000 mg/kg  
Method: OECD Test Guideline 401  
GLP: yes  
  
LD50 (Mouse, male and female): > 5,000 mg/kg  
Method: OECD Test Guideline 401  
GLP: yes

**Acute inhalation toxicity** . . . . . : LC50 (Rat, male and female): > 4.4 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
GLP: yes

Assessment: The substance or mixture has no acute inhalation toxicity  
Remarks: An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration.

**Acute dermal toxicity** . . . : LD50 (Rat, male and female): > 5,000 mg/kg  
Method: OECD Test Guideline 402  
GLP: yes

**Skin corrosion/irritation**

**Product:**

**Species** . . . . . : Rabbit  
**Result** . . . . . : No skin irritation  
**GLP** . . . . . : yes

**Components:**

**Bifenazate:**

**Species** . . . . . : Rabbit  
**Exposure time** . . . . . : 4 h

**Method** . . . . . : OECD Test Guideline 404  
**Result** . . . . . : No skin irritation  
**GLP** . . . . . : yes

**Serious eye damage/eye irritation**

**Product:**

**Species** . . . . . : Rabbit  
**Result** . . . . . : No eye irritation  
**GLP** . . . . . : yes

**Components:**

**Bifenazate:**

**Species** . . . . . : Rabbit  
**Result** . . . . . : No eye irritation  
**Exposure time** . . . . . : 48 h  
**Method** . . . . . : OECD Test Guideline 405  
**GLP** . . . . . : yes

**Respiratory or skin sensitisation**

**Product:**

**Species** . . . . . : Guinea pig  
**Assessment** . . . . . : May cause sensitisation by skin contact.  
**GLP** . . . . . : yes

**Components:**

**Bifenazate:**

**Test Type** . . . . . : Maximisation Test (GPMT)  
**Species** . . . . . : Guinea pig  
**Assessment** . . . . . : May cause sensitisation by skin contact.  
**Method** . . . . . : OECD Test Guideline 406  
**GLP** . . . . . : yes

**Germ cell mutagenicity**

**Components:**

**Bifenazate:**

**Genotoxicity in vitro** . . . : Test Type: Ames test  
Metabolic activation: with and without metabolic activation  
Result: negative  
GLP: yes  
  
: Test Type: In Vitro mammalian Cell Gene Mutation Test  
Metabolic activation: with

**FLORAMITE® SC**

**EPA Registration Number: 400-508-59807**

and without metabolic activation  
Result: negative  
GLP: yes

: Test Type: Chromosome aberration test in vitro  
Metabolic activation: with and without metabolic activation  
Result: negative  
GLP: yes

**Genotoxicity in vivo** . . . . .: Test Type: In vivo micronucleus test  
Species: Mouse  
Result: negative  
GLP: yes

**Germ cell mutagenicity - Assessment** . . . . .: Animal testing did not show any mutagenic effects.

**Carcinogenicity**

**Components:**

**Bifenazate:**

**Carcinogenicity**

**- Assessment** . . . . .: Animal testing did not show any carcinogenic effects.

**Reproductive toxicity**

**Components:**

**Bifenazate:**

**Reproductive toxicity -**

**Assessment** . . . . .: No toxicity to reproduction  
No effects on or via lactation

**STOT - single exposure**

**Product:**

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

**Components:**

**Bifenazate:**

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

**STOT - repeated exposure**

**Product:**

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

**Components:**

**Bifenazate:**

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

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Product:**

**Toxicity to fish** . . . . .: LC50 (Oncorhynchus mykiss (rainbow trout)): 1.4 mg/l  
Exposure time: 96 h

**Toxicity to daphnia and other aquatic invertebrates** . . . . .: EC50 (Daphnia magna (Water flea)): 1.4 mg/l  
Exposure time: 48 h

**Toxicity to algae** . . . . .: EC50 (Algae): 1.3 mg/l  
Exposure time: 72 h

**Components:**

**Bifenazate:**

**Toxicity to fish** . . . . .: LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.58 mg/l  
Exposure time: 96 h  
Test Type: flow-through test  
GLP: yes

LC50 (Oncorhynchus mykiss (rainbow trout)): 0.76 mg/l  
Exposure time: 96 h  
Test Type: flow-through test  
GLP: yes

**Toxicity to daphnia and other aquatic invertebrates** . . . . .: EC50 (Daphnia magna (Water flea)): 0.5 mg/l  
Exposure time: 48 h  
Test Type: flow-through test  
GLP: yes

LC50 (Crassostrea virginica): 0.42 mg/l  
Exposure time: 96 h  
Test Type: flow-through test  
GLP: yes

**FLORAMITE® SC**

**EPA Registration Number: 400-508-59807**

**Toxicity to algae** . . . . . IC50 (Lemna gibba):  
> 3.82 mg/l  
Exposure time: 7 d  
Analytical monitoring: yes  
GLP: yes

NOEC (Lemna gibba): >  
3.82 mg/l  
Exposure time: 7 d  
Analytical monitoring: yes  
GLP: yes

NOEC (Selenastrum  
capricornutum (green  
algae)): 0.25 mg/l  
Exposure time: 96 h  
GLP: yes

ErC50 (Selenastrum  
capricornutum (green  
algae)): > 2.02 mg/l  
Exposure time: 96 h  
GLP: yes

EbC50 (Selenastrum  
capricornutum (green  
algae)): 0.9 mg/l  
Exposure time: 96 h  
GLP: yes

NOEC (Navicula pellicu-  
losa): 0.52 mg/l  
Exposure time: 96 h  
GLP: yes

EbC50 (Navicula pellicu-  
losa): 0.82 mg/l  
Exposure time: 96 h  
GLP: yes

ErC50 (Navicula pellicu-  
losa): 1.4 mg/l  
Exposure time: 96 h  
GLP: yes

NOEC(b) (Anabaena  
flos-aquae (cyanobacteri-  
um)): 0.53 mg/l  
Exposure time: 96 h  
GLP: yes

NOEC(r) (Anabaena  
flos-aquae (cyanobacteri-  
um)): 1.13 mg/l  
Exposure time: 96 h  
GLP: yes

EbC50 (Anabaena flos-  
aquae (cyanobacteri-  
um)): 1.8 mg/l  
Exposure time: 96 h

GLP: yes

ErC50 (Anabaena flos-  
aquae (cyanobacteri-  
um)): > 4.48 mg/l  
Exposure time: 96 h  
GLP: yes

NOEC (Skeletonema  
costatum): 0.2 mg/l  
Exposure time: 96 h  
GLP: yes

EbC50 (Skeletonema  
costatum): 0.3 mg/l  
Exposure time: 96 h  
GLP: yes

ErC50 (Skeletonema  
costatum): 0.36 mg/l  
Exposure time: 96 h  
GLP: yes

**M-Factor (Acute  
aquatic toxicity)** . . . . . 1

**Toxicity to fish  
(Chronic toxicity)** . . . . . NOEC (Oncorhynchus  
mykiss (rainbow trout)):  
0.017 mg/l  
Exposure time: 87 d  
Test Type: flow-through  
test  
Analytical monitoring: yes  
GLP: yes

**Toxicity to daphnia and other aquatic invertebrates  
(Chronic toxicity)** . . . . . NOEC (Daphnia magna  
(Water flea)): 0.15 mg/l  
Exposure time: 21 d  
Analytical monitoring: yes  
GLP: yes

**M-Factor (Chronic  
aquatic toxicity)** . . . . . 1

**Toxicity to soil  
dwelling organisms** . . . . . LC50 (Eisenia fetida  
(earthworms)): > 1,250  
mg/kg  
Exposure time: 14 d  
GLP: yes

NOEC (Eisenia fetida  
(earthworms)): 95 mg/kg  
Exposure time: 14 d  
GLP: yes

**FLORAMITE® SC**

**EPA Registration Number: 400-508-59807**

**Toxicity to terrestrial organisms**

LD50 (Apis mellifera (bees)): 8.50 µg/bee  
Exposure time: 48 h  
End point: mortality  
GLP: yes

**Persistence and degradability**

**Product:**

**Biodegradability** . . . . . : Result: Not readily biodegradable.  
Remarks: Not readily biodegradable.

**Components:**

**Bifenazate:**

**Biodegradability** . . . . . : Result: According to the results of tests of biodegradability this product is not readily biodegradable.

**Bioaccumulative potential**

**Components:**

**Bifenazate:**

**Partition coefficient: n-octanol/water** . . . . . : log Pow: 3.4 (25 °C)

**Mobility in soil**

**Product:**

**Mobility** . . . . . : Remarks: No data available

**Other adverse effects**

**Product:**

**Additional ecological information** . . . . . : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
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 chemical or used container.  
Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging** . . . : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.

**14. TRANSPORT INFORMATION**

**International Regulation**

**IATA-DGR**

**UN/ID No.** . . . . . : UN 3082  
**Proper shipping name** . . . : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bifenazate)

**Class** . . . . . : 9  
**Packing group** . . . . . : III  
**Labels** . . . . . : Miscellaneous

**Packing instruction (cargo aircraft)** . . . . . : 964

**Packing instruction (passenger aircraft)** . . . . . : 964

**IMDG-Code**

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

**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.

**National Regulations**

**49 CFR**

**UN/ID/NA number** . . . . . : UN 3082  
**Proper shipping name** . . . . . : ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (Bifenazate)

**Class** . . . . . : 9  
**Packing group** . . . . . : III  
**Labels** . . . . . : CLASS 9

**ERG Code** . . . . . : 171

**Marine pollutant** . . . . . : yes(Bifenazate)

**Remarks** . . . . . : Above applies only to containers over 119 gallons or 450 liters. Not regulated if shipped in packages less than or equal to 119 gallons (450 liters).  
Not regulated by DOT and TDG if shipped or transported in packaging less than 450 liters by road and/or rail.



**FLORAMITE® SC**

**EPA Registration Number: 400-508-59807**

**15. REGULATORY INFORMATION**

**OSHA Hazards** . . . . .: Skin sensitiser

**EPCRA - Emergency Planning and Community Right-to-Know Act**

**SARA 311/312 Hazards** . . . : Chronic Health Hazard

**California Prop 65** . . . . .: WARNING! This product contains a chemical known to the State of California to cause cancer.

1,4-dioxane	123-91-1
ethylene oxide	75-21-8
methyloxirane	75-56-9

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

ethylene oxide	75-21-8
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**FIFRA Hazard Information:**

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The pesticide label also includes other important information, including directions for use.

The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

**CAUTION**

Harmful if swallowed. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

This pesticide is toxic to birds, estuarine/marine invertebrates, and fish. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

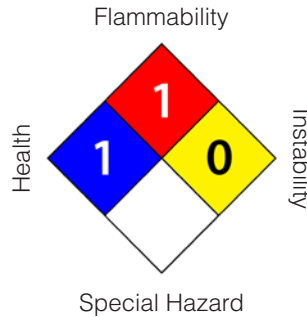
This product is toxic to bees exposed to direct treatment. Do not apply this product while bees are actively visiting the treatment area.

Do not use or store near heat or open flame.

**16. OTHER INFORMATION**

**Further information**

**NFPA:**



**HMIS III:**

<b>HEALTH</b>	<b>1*</b>
<b>FLAMMABILITY</b>	<b>1</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = Not significant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme, \* = Chronic

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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