



Material Safety Data Sheet

FLORAMITE® SC/LS

Version: 1.15

Revision Date: 01/17/2012

Print Date: 01/27/2012

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: *FLORAMITE® SC/LS*

Product Use Description: Plant protection agent

Chemical nature: Miticide

Registration number: 400-508

Company: Chemtura Corporation
199 Benson Road
Middlebury, CT
06749
United States of America

Telephone: (US) +1 866-430-2775

Emergency telephone number: CHEMTREC: (24 hours) 800-424-9300
:

Chemtura Corporation Emergency Response: CHEMTURA : 800-292-5898

For additional emergency telephone numbers see section 16 of the Safety Data Sheet.

Prepared by: Product Safety Department
(US) +1 866-430-2775

01/17/2012

MSDSRequest@chemtura.com

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Warning

Form: liquid Colour: off-white to tan Odour: characteristic

Hazard Summary : May cause sensitization by skin contact.
May cause eye irritation.

OSHA Hazards : THIS MATERIAL IS HAZARDOUS UNDER THE CRITERIA OF THE FEDERAL
OSHA HAZARD COMMUNICATION STANDARD 29CFR 1910.1200.

Potential Health Effects

Primary Routes of Entry : Skin contact



Material Safety Data Sheet

FLORAMITE® SC/LS

Version: 1.15

Revision Date: 01/17/2012

Print Date: 01/27/2012

Eye contact
Inhalation

Inhalation : May cause irritation of respiratory tract.

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

Eyes : May cause eye irritation.

Ingestion : May be harmful if swallowed.

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.

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.

ACGIH

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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

| Component / CAS-No. | Weight percent |
|-----------------------------|----------------|
| BIFENAZATE 149877-41-8 | 22.6 % |
| propane-1,2-diol 57-55-6 | >= 5 - < 10 % |

SECTION 4. FIRST AID MEASURES

First aid procedures

Inhalation : Call a POISON CENTER or doctor/ physician.

Skin contact : Remove contaminated clothing and shoes.
Call a POISON CENTER or doctor/ physician.

Eye contact : Call a POISON CENTER or doctor/ physician.

Ingestion : Call a physician or poison control centre immediately.
Do not induce vomiting without medical advice.



Material Safety Data Sheet

FLORAMITE® SC/LS

Version: 1.15

Revision Date: 01/17/2012

Print Date: 01/27/2012

Notes to physician

- Symptoms : sensitising effects
- Risks : sensitising effects
- Treatment : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

SECTION 5. FIREFIGHTING MEASURES

Flammable properties

- Flash point : > 219 °F (104 °C)
- Ignition temperature : > 752 °F (400 °C)

Fire fighting

- Suitable extinguishing media : Extinguishing media - large fires
Alcohol-resistant foam
(on small fires)
Carbon dioxide (CO₂)
Dry chemical
- Unsuitable extinguishing media : Water spray jet
- Further information : Prevent fire extinguishing water from contaminating surface water or the ground water system.

Protective equipment and precautions for firefighters

- Specific hazards during firefighting : No information available.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Complete suit protecting against chemicals
Full protective flameproof clothing

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Wear suitable protective equipment.
Avoid contact with skin and eyes.
- Environmental precautions : Do not allow material to contaminate ground water system.
- Methods for containment /
Methods for 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.



Material Safety Data Sheet

FLORAMITE® SC/LS

Version: 1.15

Revision Date: 01/17/2012

Print Date: 01/27/2012

SECTION 7. HANDLING AND STORAGE

Handling

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

Storage

Requirements for storage areas and containers : Keep in a dry, cool place.
Other data : Stable under recommended storage conditions.
Stable at normal ambient temperature and pressure.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Components with workplace control parameters

| Components / CAS-No. | Value / Basis / Update | Control parameters | Further information |
|-----------------------------|------------------------------|----------------------------------|---------------------|
| propane-1,2-diol 57-55-6 | TWA US WEEL 2008-01-01 | 10 mg/m ³ | |
| 1,4-dioxane 123-91-1 | TWA ACGIH 2007-01-01 | 20 ppm | |
| | TWA OSHA P1 1997-08-04 | 100 ppm 360 mg/m ³ | |
| | TWA OSHA P0 1989-01-19 | 25 ppm 90 mg/m ³ | |
| ethylene oxide 75-21-8 | TWA ACGIH 2007-01-01 | 1 ppm | |
| methyloxirane 75-56-9 | TWA ACGIH 2007-01-01 | 2 ppm | |
| | TWA | 100 ppm | |



Material Safety Data Sheet

FLORAMITE® SC/LS

Version: 1.15

Revision Date: 01/17/2012

Print Date: 01/27/2012

| | | | |
|--|------------------------------|--------------------|--|
| | OSHA P1 1997-08-04 | 240 mg/m3 | |
| | TWA OSHA P0 1989-01-19 | 20 ppm 50 mg/m3 | |

Engineering measures

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

Personal protective equipment

Eye protection : Safety glasses with side-shields

Hand protection : Impervious gloves

Skin and body protection : impervious clothing

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

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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : liquid
Colour : off-white
to
tan

Odour : characteristic

Safety data

Flash point : > 219 °F (104 °C)

Ignition temperature : > 752 °F (400 °C)

pH : 6.9



Material Safety Data Sheet

FLORAMITE® SC/LS

Version: 1.15

Revision Date: 01/17/2012

Print Date: 01/27/2012

Boiling point/boiling range : Note: no data available
Specific Gravity : 1.060 at
Water solubility : Note: dispersible
Viscosity, dynamic : 83 mPa.s
at 68 °F (20 °C)
Surface tension : 42.1 mN/m
at 77 °F (25 °C)

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid : Remarks: Extremes of temperature and direct sunlight.
Materials to avoid : Remarks: Oxidizing agents
Hazardous decomposition products : Note: Carbon oxides
nitrogen oxides (NOx)
Hazardous reactions : Hazardous polymerisation does not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50: > 5,000 mg/kg
Species: rat
: LD50: > 2,000 mg/kg
Species: rat
Acute inhalation toxicity : LC50: > 1.8 mg/l
Species: rat
Acute dermal toxicity : LD50 Dermal: > 5,000 mg/kg
Species: rabbit
Skin irritation : Species: rabbit
Result: No skin irritation
Eye irritation : Species: rabbit
Result: No eye irritation
Sensitisation : Species: guinea pig
Classification: May cause sensitization by skin contact.



Material Safety Data Sheet

FLORAMITE® SC/LS

Version: 1.15

Revision Date: 01/17/2012

Print Date: 01/27/2012

CMR effects
BIFENAZATE : Carcinogenicity: Animal testing did not show any carcinogenic effects.
Mutagenicity: Animal testing did not show any mutagenic effects.
Teratogenicity: No effects on or via lactation
Reproductive toxicity: No toxicity to reproduction

Further information : The toxicological data has been taken from products of similar composition.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

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

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

Toxicity to algae : EC50: 1.3 mg/l
Exposure time: 72 h
Species: Algae

Elimination information (persistence and degradability)

Bioaccumulation
BIFENAZATE : Bioconcentration factor (BCF): 83
Method: estimated

Mobility : Remarks:
no data available

Surface tension : 42.1 mN/m
at 25 °C

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

Further information on ecology

Ecotoxicology Assessment

Results of PBT assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

Additional ecological information : Information given is based on data on the components and the ecotoxicology of similar products.



Material Safety Data Sheet

FLORAMITE® SC/LS

Version: 1.15

Revision Date: 01/17/2012

Print Date: 01/27/2012

: The following information is applicable to a component of this material:

SECTION 13. DISPOSAL CONSIDERATIONS

Further information : In accordance with local and national regulations.

SECTION 14. TRANSPORT INFORMATION

DOT

UN number : 3082
Description of the goods : Environmentally hazardous substances, liquid, n.o.s.
: (Bifenazate)
Class : 9
Packing group : III
ERG Code : 171

IATA

UN number : 3082
Description of the goods : Environmentally hazardous substance, liquid, n.o.s.
(Bifenazate)
Class : 9
Packing group : III
Labels : 9
Environmentally hazardous : yes

IMDG

UN number : 3082
Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.
(Bifenazate)
Class : 9
Packing group : III
EmS Number 1 : F-A
EmS Number 2 : S-F
Marine pollutant : yes
Bifenazate
Environmentally hazardous : yes
Bifenazate

SECTION 15. REGULATORY INFORMATION

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



Material Safety Data Sheet

FLORAMITE® SC/LS

Version: 1.15

Revision Date: 01/17/2012

Print Date: 01/27/2012

SARA 311/312 Hazards : Acute Health Hazard
Chronic Health Hazard

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

| | |
|---|------------------------|
| 1,4-Dioxane | 123-91-1 1,4-dioxane |
| Oxirane | 75-21-8 ethylene oxide |
| Oxirane, methyl- | 75-56-9 methyloxirane |
| WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. | |
| Oxirane | 75-21-8 ethylene oxide |

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

US.TSCA Not On TSCA Inventory

DSL This product contains the following components that are not on the Canadian DSL nor NDSL lists.

AICS Not in compliance with the inventory

NZIoC Not in compliance with the inventory

ENCS Not in compliance with the inventory



Material Safety Data Sheet

FLORAMITE® SC/LS

Version: 1.15

Revision Date: 01/17/2012

Print Date: 01/27/2012

| | |
|---------------|---|
| KECI | Not in compliance with the inventory |
| PICCS | Not in compliance with the inventory |
| IECSC | Not in compliance with the inventory |
| CH INV | The formulation contains substances listed on the Swiss Inventory |

SECTION 16. OTHER INFORMATION

Further information

HMIS Classification : Health hazard: 1
Chronic Health Hazard: *
Flammability: 1
Reactivity: 0



Material Safety Data Sheet

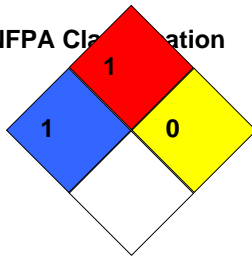
FLORAMITE® SC/LS

Version: 1.15

Revision Date: 01/17/2012

Print Date: 01/27/2012

NFPA Classification



: Health hazard: 1
Fire Hazard: 1
Reactivity Hazard: 0

Other Emergency Phone Number

| | | |
|-----------------------|---------------------|----------------------|
| <u>Latin America:</u> | Brazil | +55 113 711 9144 |
| | All other countries | +44 (0) 1235 239 670 |
| <u>Mexico:</u> | | +52 555 004 8763 |

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.