



MATERIAL SAFETY DATA SHEET

Floramite® 240 SC

Version: 1.7
Date of Issue: 10/08/2009
Date printed: 12/31/2009

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Floramite® 240 SC

Chemical name: Bifenazate

Use of substance/preparation: Miticide

Supplier: Chemtura Canada Co./Cie
25 ERB STREET
Elmira, Ontario N3B 3A3 Canada

Manufacturer: Chemtura Corporation
199 Benson Road
Middlebury, CT 06749 USA

Emergency telephone number: 866-744-3060 (Canada 24 hours)
CANUTEC (24 hours) 613-996-6666 (call collect)

Environmental, Health and Safety Department: 866-430-2775

Customer Care: +44 161 875 3800

Prepared by Product Safety Department Date of Issue: 10/08/2009
(US) +1 866-430-2775
(EU) +44 (0) 1753.603.000
Email: MSDSRequest@chemtura.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
CAUTION!
MAY CAUSE EYE IRRITATION.
MAY CAUSE SKIN SENSITIZATION.

3. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT	% BY WEIGHT
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Bifenazate CAS# 149877-41-8	22.6
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Ingredients not precisely identified are non-hazardous and/or proprietary.

WHMIS CLASSIFICATION

This product is registered under the Pest Control Products Act and is therefore exempt from WHMIS

(M)SDS# 000000026994

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supplier labeling and MSDS requirements. Please read entire MSDS and product label for safety precautions.

CPR Compliance

This product has been classified with the hazard criteria of the CPR, and the MSDS contains all the information required by CPR.

4. FIRST AID MEASURES

Swallowing

If patient is fully conscious, give two glasses of water. Do not induce vomiting unless told to do so by the poison control center or doctor. Obtain medical attention immediately. Do not give milk, oily products, fat or alcohol. Do not give anything by mouth to an unconscious person.

Inhalation

Remove to fresh air. Give artificial respiration if not breathing. Obtain medical attention.

Skin contact

Wash skin with soap and water. Remove contaminated clothing. Wash clothing before re-use. Obtain medical attention if irritation persists.

Eye contact

Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain medical attention.

Notes to physician

ROUTES OF ENTRY: Eyes, skin, ingestion, inhalation, mist.

5. FIRE-FIGHTING MEASURES

Flash point: > 104 °C

Hazardous combustion products

Irritating fumes.
Oxides of carbon.
Oxides of nitrogen.

Special fire fighting procedures

Do not discharge extinguishing waters into streams, rivers and lakes.

Special protective equipment for firefighters

Body covering protective clothing, full "turn-out" gear.
Self-contained breathing apparatus.

Extinguishing media

Suitable: **Large fires:**
 - alcohol-type foam or universal-type foams
 Small fires:
 - CO2
 - dry chemical

Unsuitable: - water jets

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear suitable protective equipment., Avoid contact with eyes and skin.

Environmental precautions

Prevent from entering sewer system, surface water or soil.

Methods for cleaning up

Observe government regulations.



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Small spills: Absorb on inert material such as sand, earth, vermiculite.
Collect for disposal.

Large spills Dike to contain spill.
Pump excess material into suitable container (metal drums, metal tank, or such).

7. HANDLING AND STORAGE

HANDLING

Handling precautions

Do not get in eyes., Avoid prolonged or repeated contact with skin., Avoid breathing vapor., Use with adequate ventilation., Wash thoroughly after handling.

Other precautions

NOTE TO END-USERS: The employee protection recommendations on this MSDS may differ from those on the product label. For normal use of this product, always refer to the personal protective equipment requirements on the product label.

STORAGE

Storage requirements

Store in a cool, dry place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT VALUES

Consult local authorities for acceptable provincial values.

PERSONAL PROTECTION

Respiratory protection

In the absence of engineering controls sufficient to maintain airborne concentrations below recommended occupational exposure limit values, appropriate respiratory protection should be utilized., The determination of appropriate respiratory protection is best performed, on a case by case basis, taking into consideration the exposure conditions of the particular operation. The respirator manufacturer should be consulted to ensure that the air-purifying cartridges utilized will provide adequate protection for the exposure conditions and period of wear concerned. For emergency conditions where the exposure limit may be greatly exceeded, use an approved positive-pressure self-contained breathing apparatus.

Hand protection / protective gloves

Chemical resistant protective gloves

Eye protection

Safety glasses with side shields.

Skin protection

Wear protective clothing, such as long sleeves to minimize skin contact.

Other protective equipment

Eye bath, Safety shower

ENGINEERING CONTROLS

Ventilation

General (mechanical) room ventilation is expected to be satisfactory., Special, local ventilation is needed at points where vapors can be expected to escape to the workplace air.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Physical state	Liquid
Color	Off-white to light tan



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Odor Characteristic

OTHER PROPERTIES

Boiling point Not available
pH 6.9
Concentration:
10 g/l
Density 1.061 g/cm³
Solubility in water Dispersible
Solubility in organic solvents Miscible with organic solvents
Evaporation rate (Butyl Acetate=1) Similar to water
Flash point > 104 °C
Autoignition temperature > 400 °C
Dynamic viscosity 83 mPa.s
Oxidizing properties Not applicable
Surface tension 42.1 dyn/cm at 25 °C
Explosive properties Not applicable

10. STABILITY AND REACTIVITY

Stability: This product is stable under normal storage and handling conditions.

Incompatible materials:

Oxidizing agents.

Hazardous combustion products:

Irritating fumes.
Oxides of carbon.
Oxides of nitrogen.

Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

GENERAL

The following information is based on analogy with a similar material.

Component data 480 g/L SC formulation Acute toxicity - Swallowing:	LD50 - Rat (Males) Result: > 5,000 mg/kg
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Component data 480 g/L SC formulation Acute toxicity - Swallowing:	LD50 - Rat (Females) Result: > 2,000 mg/kg
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Component data 480 g/L SC formulation Acute toxicity - Skin absorption:	LD50 - Rabbit Result: > 5,000 mg/kg
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Component data	LC50 - Rat
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480 g/L SC formulation Acute toxicity - Inhalation:	Result: > 1.8 mg/l Exposure time: 4 h
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<u>Component data</u> 480 g/L SC formulation Skin irritation - Skin contact:	Species: Rabbit Classification: Not irritating
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<u>Component data</u> 480 g/L SC formulation Eye irritation - Eye contact:	Species: Rabbit Result: Irritant
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<u>Component data</u> 480 g/L SC formulation Eye irritation - Eye contact:	Species: Rabbit Result: Not irritating
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<u>Component data</u> 480 g/L SC formulation Sensitization:	Species: Guinea pigs Result: Non sensitizing.
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<u>Component data</u> 480 g/L SC formulation Sensitization:	Species: Guinea pig: Remark: May cause sensitization by skin contact.
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MUTAGENICITY:
Component (480 g/L SC formulation): Test results are based on a major component. Negative
CARCINOGENICITY
Component (480 g/L SC formulation): Test results are based on a major component.
CARCINOGENICITY
Component (480 g/L SC formulation): Negative

TOXICITY TO REPRODUCTION/FERTILITY
Component(480 g/L SC formulation): Test results are based on a major component.

TOXICITY TO REPRODUCTION/FERTILITY
Component(480 g/L SC formulation): Negative

12. ECOLOGICAL INFORMATION

The following information is based on analogy with a similar material:

<u>Component ecotoxicology</u> 480 g/L SC formulation Acute toxicity fish:	LC50 - Rainbow trout (Oncorhynchus mykiss) Result: 1.4 mg/l Exposure time: 96 h
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<u>Component ecotoxicology</u> 480 g/L SC formulation Aquatic toxicity to plants:	EC50 - Algae Result: 1.3 mg/l Exposure time: 72 h
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<u>Component ecotoxicology</u> 480 g/L SC formulation Acute toxicity to aquatic invertebrates:	EC50 - Water flea (Daphnia magna) Result: 1.4 mg/l Exposure time: 48 h
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13. DISPOSAL CONSIDERATIONS

General: Dispose of waste material in compliance with all federal, provincial and local regulations., Do not discharge to sewers and



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natural waters.

14. TRANSPORT INFORMATION

TDG - Canada

Not regulated by ground or rail.

Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bifenazate)
Class: 9
UN ID #: UN 3082
Packing group: III

IMDG Classification

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s.
Class: 9
Subsidiary risk: marine pollutant
UN ID #: UN 3082
Packing group: III
Technical description (Bifenazate)

ICAO/IATA Classification

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s.
Class: 9
UN ID #: UN 3082
Packing group: III
Technical description (Bifenazate)

Only regulated by air Into, Out of or Within the United States in containers 881.8 lbs (400 kg) or greater.

15. REGULATORY INFORMATION

WHMIS CLASSIFICATION

This product is registered under the Pest Control Products Act and is therefore exempt from WHMIS supplier labeling and MSDS requirements. Please read entire MSDS and product label for safety precautions.

CPR Compliance

This product has been classified with the hazard criteria of the CPR, and the MSDS contains all the information required by CPR.

CHEMICAL INVENTORY

Canada: This product is exempt from the New Substances Notification Regulations under CEPA when used as a component in a registered pesticide formulation., PCP# 27924
United States: This product is subject to regulation under the US Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and is therefore exempt from TSCA Inventory listing requirements.

16. OTHER INFORMATION



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STP	Standard temperature and pressure
W/W	Weight/Weight

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