



MATERIAL SAFETY DATA SHEET

FLORAMITE®

Version: 1.6
Date of Issue: 06/26/2007
Date printed: 06/27/2007

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : FLORAMITE®

Chemical name: Bifenazate

Use of substance/preparation: Miticide

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

Emergency telephone number: CHEMTREC (24 hours) 800-424-9300
Chemtura Corporation Emergency Response (24 hours) 800-292-5898

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

Prepared by Product Safety Department Date of Issue: 06/26/2007
(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.

AIRBORNE DUST PARTICLES MAY FORM EXPLOSIVE AIR-DUST MIXTURE.

3. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT	% BY WEIGHT
Bifenazate CAS# -	50
Kaolin clay CAS# 1332-58-7	< 35
Silicon dioxide CAS# 7631-86-9	< 10
Inerts CAS# -	< 50



MATERIAL SAFETY DATA SHEET

FLORAMITE®

Version: 1.6
Date of Issue: 06/26/2007
Date printed: 06/27/2007

Ingredients not precisely identified are non-hazardous and/or proprietary.

4. FIRST AID MEASURES

Swallowing

Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Inhalation

Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Skin contact

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

Eye contact

Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lens, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.

5. FIRE-FIGHTING MEASURES

Flash point: > 230 °F > 110 °C
Flammable limits:
Lower limit: Not available
Upper limit: Not available
Autoignition temperature: Not available

NFPA CLASSIFICATION

Health: 1	Flammability: 3	Reactivity: 0	Special provisions: Dust explosion hazard
------------------	------------------------	----------------------	--

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:

- CO2
- dry powder
- foam
- water fog

Unsuitable: - water spray

Unusual fire and explosion hazards

Avoid dispersion of dust in air to reduce potential for dust ignition/explosions. Avoid dispersion of dust in air to reduce potential for dust ignition/explosions.

6. ACCIDENTAL RELEASE MEASURES



MATERIAL SAFETY DATA SHEET

FLORAMITE®

Version: 1.6
Date of Issue: 06/26/2007
Date printed: 06/27/2007

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

Sweep up and collect in a suitable container for disposal.
Avoid dust formation.

7. HANDLING AND STORAGE

HANDLING

Handling precautions

Do not get in eyes, on skin, on clothing.

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

<u>Component</u>	<u>Country</u>	<u>Type</u>	<u>Value</u>	<u>Remark</u>
Kaolin clay		ACGIH - respirable dust	2 mg/m3	8 hours
Silicon dioxide	USA	TWA, OSHA	5 mg/m3	Respirable dust
		TWA, OSHA	15 mg/m3	Total dust
		TWA, ACGIH	10 mg/m3	Total dust

PERSONAL PROTECTION

Respiratory protection

A respirator approved for dust/fume or mist protection is recommended for mists, sprays or aerosols., 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.

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.

ENGINEERING CONTROLS

Ventilation

If personnel exposure exceeds exposure limits, apply local exhaust ventilation at points of dust generation.



MATERIAL SAFETY DATA SHEET

FLORAMITE®

Version: 1.6
Date of Issue: 06/26/2007
Date printed: 06/27/2007

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Physical state	Powder
Color	Pale beige to White
Odor	Negligible
Odor threshold	Not available

OTHER PROPERTIES

Boiling point	Not available
Melting point	Not available
pH	10.3
Density	1.74 g/cm ³ at 25 °C
Vapor pressure	
Solubility in water	Insoluble
Solubility in organic solvents	Soluble
Partitioning coefficient	Not available
Flash point	> 230 °F > 110 °C Method: Setaflash
Autoignition temperature	Not available
Upper explosion limits	Not available
Lower explosion limits	Not available
Dynamic viscosity	Not applicable

10. STABILITY AND REACTIVITY

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

Incompatible materials:

Oxidizing agents.
Strong acids.
Strong bases.

Hazardous combustion products:

Irritating fumes.
Oxides of carbon.
Oxides of nitrogen.

Hazardous polymerization: Will not occur.



MATERIAL SAFETY DATA SHEET

FLORAMITE®

Version: 1.6
Date of Issue: 06/26/2007
Date printed: 06/27/2007

11. TOXICOLOGICAL INFORMATION

SWALLOWING

Test results

Acute toxicity: LD50 Rat
Result: > 5,000 mg/kg

SKIN ABSORPTION

Test results

Acute toxicity: LD50 - Rabbit
Result: > 5,000 mg/kg

INHALATION

Test results

Acute toxicity: LC50 - Rat
Result: > 5.2 mg/l
Exposure time: 4 h

SKIN CONTACT

Test results

Skin irritation: Species: Rabbit
Remark: May cause slight irritation.

EYE CONTACT

Test results

Eye irritation: Species: Rabbit
Result: Mild irritation

SENSITIZATION

Test results: Species: - Guinea pigs
Result: Non sensitizing.

MUTAGENICITY

Assessment: Test results are based on a major component. Negative

CARCINOGENICITY

Assessment: Negative

TOXICITY TO REPRODUCTION/FERTILITY

Assessment: Negative

12. ECOLOGICAL INFORMATION

Ecological data on this product are not available.
However, the following data exist for the main component:

<u>Component ecotoxicology</u> Bifenazate <u>Acute toxicity fish:</u>	LC50 - Rainbow trout (Oncorhynchus mykiss) Result: 0.76 mg/l Exposure time: 96 h
<u>Component ecotoxicology</u> Bifenazate <u>Acute toxicity fish:</u>	LC50 - Bluegill (Lepomis macrochirus) Result: 0.58 mg/l Exposure time: 96 h
<u>Component ecotoxicology</u> Bifenazate <u>Aquatic toxicity to plants:</u>	EC50 - Sclenostomum capricornutum Result: 0.89 mg/l



MATERIAL SAFETY DATA SHEET

FLORAMITE®

Version: 1.6
Date of Issue: 06/26/2007
Date printed: 06/27/2007

Component ecotoxicology Bifenazate Acute toxicity to aquatic invertebrates:	LC50 - Water flea (Daphnia magna) Result: 0.5 mg/l Exposure time: 48 h
---	--

13. DISPOSAL CONSIDERATIONS

General: Dispose of in accordance with appropriate Federal, State, and local regulations., Avoid discharge to sewers and natural waters.

14. TRANSPORT INFORMATION

DOT Classification

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Bifenazate)
Class: 9
UN ID #: UN3077
Packing group: III
marine pollutant: MARINE POLLUTANT

Not regulated by ground or rail if shipped or transported in container less than 400 kg.

IMDG Classification

Proper shipping name: Environmentally hazardous substance, solid, n.o.s.
Class: 9
Subsidiary risk: marine pollutant
UN ID #: UN 3077
Packing group: III
Marpol: MARINE POLLUTANT
Technical description (Bifenazate)

ICAO Classification

Proper shipping name: Environmentally hazardous substance, solid, n.o.s.
Class: 9
UN ID #: UN 3077
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

Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release of quantities of hazardous substances equal to or greater than the reportable quantities (RQ's) in 40CFR302.4.
Components present in this product at a level which could require reporting under the statute are:

**** NONE ****

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40CFR372 (for SARA 313). This information must be included in MSDS's that are copied and distributed for this material.
Components present in this product at a level which could require reporting under the statute are:

**** NONE ****



MATERIAL SAFETY DATA SHEET

FLORAMITE®

Version: 1.6
Date of Issue: 06/26/2007
Date printed: 06/27/2007

New Jersey Worker and Community Right-To-Know Act (Labeling Requirements)

Chemical name	CAS#	New Jersey TS Number
Bifenazate	-	
Kaolin clay	1332-58-7	
Silicon dioxide	7631-86-9	
Inerts	-	

California Proposition 65

**** NONE ****

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# 27925

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.

Food additive
No data available.

Food contact
No data available.

Cosmetics
No data available.

Pharmaceuticals
No data available.

16. OTHER INFORMATION

RECOMMENDED USES AND RESTRICTIONS: NOTE TO END-USERS: This MSDS is being provided to all interested persons in accordance with federal and state right-to-know laws. Precautionary Statements, First Aid Statements and Directions for Use of this product by end-users are contained on the product label and must be followed at all times.

HMIS RATING

Health: 1	Flammability: 3	Reactivity: 0	PPI: X
------------------	------------------------	----------------------	---------------

STP	Standard temperature and pressure
W/W	0 (HMIS)
1 (HMIS)	Slight hazard
2 (HMIS)	Moderate hazard
3 (HMIS)	Serious hazard
4 (HMIS)	Severe hazard
X (HMIS)	Personal protection rating to be supplied by user depending on use conditions

Acramite®
is a
registered
trademark
of a
subsidiary of

Chemtura Corporation.

Copyright 2007 Chemtura Corporation

THE OPINIONS EXPRESSED HEREIN ARE THOSE OF QUALIFIED EXPERTS WITHIN CHEMTURA CORPORATION. WE BELIEVE THAT THE INFORMATION CONTAINED HEREIN IS CURRENT AS OF THE DATE OF THIS SAFETY DATA SHEET. SINCE THE USE OF THIS INFORMATION AND OF THESE OPINIONS AND THE CONDITIONS OF USE OF THIS PRODUCT



MATERIAL SAFETY DATA SHEET

FLORAMITE®

Version: 1.6

Date of Issue: 06/26/2007

Date printed: 06/27/2007

ARE NOT WITHIN THE CONTROL OF CHEMTURA CORPORATION, IT IS THE USER'S OBLIGATION TO DETERMINE THE CONDITIONS OF SAFE USE OF THE PRODUCTS.