



Material Safety Data Sheet

ACRAMITE®-4SC

Version: 1.6

Revision Date: 10/11/2010

Print Date: 11/03/2010

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: *ACRAMITE®-4SC*

Product Use Description: Plant protection agent

Synonyms: Bifenazate

Chemical nature: Acaricide

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

Telephone: 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
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+011-886-2-2712-5668 MSDSRequest@chemtura.com

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

CAUTION!

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

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



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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
Inhalation
Eye contact
- Inhalation : May cause respiratory tract irritation.
- Skin : May cause allergic skin reaction.
- Eyes : May cause eye irritation.
- Ingestion : Harmful if swallowed.
- Chronic Exposure : May cause allergic skin reaction.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Component	CAS-No.	Weight percent
BIFENAZATE	149877-41-8	43.2 %
propane-1,2-diol	57-55-6	5 - 10 %

SECTION 4. FIRST AID MEASURES

First aid procedures

- Inhalation : Move to fresh air.
If not breathing, give artificial respiration.
Call a POISON CENTER or doctor/ physician.
- Skin contact : Remove contaminated clothing and shoes.
Wash off immediately with plenty of water for at least 15 minutes.
Call a POISON CENTER or doctor/ physician.
- Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15



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minutes.
Remove contact lenses, if present, after 5 minutes, then continue rinsing eye.
Call a POISON CENTER or doctor/ physician.

Ingestion : Call a physician or poison control centre immediately.
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.

SECTION 5. FIRE-FIGHTING MEASURES

Flammable properties

Flash point : > 219 °F (104 °C)

Lower explosion limit : Remarks: no data available

Upper explosion limit : Remarks: no data available

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 fire fighting : Burning produces irritant fumes.
Exposure to decomposition products may be a hazard to health.

Special protective equipment for fire-fighters : Body covering protective clothing, full "turn-out" gear.
Self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

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

Environmental precautions : Should not be released into the environment.



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Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

Methods for containment /
Methods for cleaning up : Dam up.
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Pick up and transfer to properly labelled containers.
Large spills should be collected mechanically (remove by pumping) for disposal.

SECTION 7. HANDLING AND STORAGE

Handling

Handling procedures : Handle in accordance with good industrial hygiene and safety practice.
Avoid contact with skin and eyes.
Avoid inhalation of vapour or mist.
Use with adequate 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.

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	
butan-1-ol 71-36-3	TWA ACGIH 2007-01-01	20 ppm	
	TWA OSHA P1 1997-08-04	100 ppm 300 mg/m ³	
	C	50 ppm	



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	OSHA P0 1989-01-19	150 mg/m3	
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Engineering measures

Personal protective equipment

- Eye protection : Safety glasses with side-shields
- Hand protection : Chemical resistant protective gloves
- Skin and body protection : Long sleeved clothing
Lab coat
- Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

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

Safety data

- Flash point : > 219 °F (104 °C)
- Lower explosion limit : Note: no data available
- Upper explosion limit : Note: no data available
- pH : 7.0
- Boiling point/boiling range : Note: no data available
- Vapour pressure : Note: similar to water
- Density : 1.104 g/cm3
at 77 °F (25 °C)



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Water solubility : Note: dispersible

Viscosity, dynamic : 550 mPa.s
at 77 °F (25 °C)

SECTION 10. STABILITY AND REACTIVITY

Materials to avoid : Remarks: Oxidizing agents
Strong acids and strong bases

Hazardous decomposition products : Note: Carbon oxides

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
Exposure time: 4 h
Species: rat

Acute dermal toxicity : LD50: > 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.

Repeated dose toxicity



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BIFENAZATE : Species: dog, male and female
Application Route: Oral
Exposure time: (28 d)
NOEL: < 7.9 mg/kg
Lowest observable effect level: 7.9 mg/kg

CMR effects
BIFENAZATE : Carcinogenicity: Not classifiable as a human carcinogen.
Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
Reproductive toxicity: No toxicity to reproduction

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

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

Further information on ecology

SECTION 13. DISPOSAL CONSIDERATIONS

Further information : In accordance with local and national regulations.
Do not dispose of waste into sewer.

SECTION 14. TRANSPORT INFORMATION



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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

IMDG

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

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



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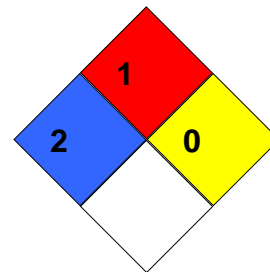
Print Date: 11/03/2010

SECTION 16. OTHER INFORMATION

Further information

HMIS Classification : Health hazard: 2
Chronic Health Hazard: *
Flammability: 1
Physical hazards: 0
PPI: Ask supervisor or safety specialist for handling instructions

NFPA Classification : Health hazard: 2
Fire Hazard: 1
Reactivity Hazard: 0



Other Emergency Phone Number

<u>Latin America:</u>	Brazil	+52 113 711 91 44
	All other countries	+44 (0)208 762 8322
<u>Mexico:</u>		+52 555 004 87 63

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.