

VITICURE(TM)

Version:

1.9

Date of Issue:

12/10/2008

Date printed:

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name:

VITICURE(TM)

Chemical name:

[1-[1[[4-Chloro-2-(trifluoromethyl)phenyl]imino]-2-propoxyethyl]-1H-imidazole

Use of substance/preparation:

Fungicide

Supplier:

Chemtura Corporation

199 Benson Road

Middlebury, CT 06749 USA

Emergency telephone

number:

CHEMTREC (24 hours) 800-424-9300, 703-527-3887

Chemtura Corporation Emergency Response (24 hours) 800-292-5898

Environmental, Health and

Safety Department:

Prepared by

866-430-2775

Product Safety Department

Date of Issue: 12/10/2008

(US) +1 866-430-2775 (EU) +44 (0) 1753.603.000

Email: MSDSRequest@chemtura.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW CAUTION! HARMFUL IF SWALLOWED. MAY CAUSE EYE IRRITATION,

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient

% BY WEIGHT

Triflumizole

CAS# 68694-11-1

42.14

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

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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.

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.

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

Autoignition temperature:

Not available

Hazardous combustion products

Oxides of carbon. Oxides of nitrogen.

<u>Special fire fighting procedures</u>
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.

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).

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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

Keep container closed., Store in a cool, dry place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT VALUES

PERSONAL PROTECTION

Respiratory protection

Self-contained breathing apparatus in high vapor concentrations.

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

<u>Ventilation</u>

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

White

to

Off-white

to

Pinkish White

Odor

Mild

Odor threshold

No data available.

OTHER PROPERTIES

Boiling point

Not available

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Melting point

Not applicable

рH

7.3

Specific gravity (H2O=1)

1.15

Vapor pressure

Solubility in water

Soluble

Solubility in organic solvents

No data available.

Partitioning coefficient

Not available

Flash point

Not available

Autoignition temperature

Not available

10. STABILITY AND REACTIVITY

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

Stability - Conditions to avoid:

None known.

Hazardous combustion products:

Oxides of carbon.
Oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

SWALLOWING

Test results

Acute toxicity:

LD50 Rat

Result: > 2,000 mg/kg

SKIN ABSORPTION

Test results

Acute toxicity:

LD50 - Rabbit

Result: > 5,000 mg/kg

INHALATION

Test results
Acute toxicity:

LC50 - Rat

Result: > 3.28 mg/l

Exposure time: 4 h

SKIN CONTACT

Test results

Skin irritation:

Species: Rabbit

Result: Not irritating

EYE CONTACT

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Test results

Eye irritation:

Species: Rabbit Result: Slight

SENSITIZATION

Test results:

Species: - Guinea pigs

Result: Negative

MUTAGENICITY

Assessment: Negative

12. ECOLOGICAL INFORMATION

Component ecotoxicology Triflumizole Acute toxicity fish:	LC50 - Rainbow trout (Oncorhynchus mykiss) Result: 0.58 mg/l Exposure time: 96 h
Component ecotoxicology Triflumizole Acute toxicity fish:	LC50 - Common carp (Cyprinus carpio) Result: 0.76 mg/l Exposure time: 96 h
Component ecotoxicology Triflumizole Acute toxicity fish:	LC50 - Bluegill (Lepomis macrochirus) Result: 1.2 mg/l Exposure time: 96 h
Component ecotoxicology Triflumizole Aquatic toxicity to plants:	EbC50 - Algae Result: 0.241 mg/l Exposure time: 96 h
Component ecotoxicology Triflumizole Acute toxicity to aquatic invertebrates:	EC50 - Water flea (Daphnia magna) Result: 1.4 mg/l Exposure time: 48 h

13. DISPOSAL CONSIDERATIONS

General:

Dispose of in accordance with appropriate Federal, State, and local regulations., Do not discharge to sewers and natural

waters

14. TRANSPORT INFORMATION

DOT Classification

Not regulated if shipped or transported in containers less than 450 liters.

IMDG Classification

Proper shipping name:

Environmentally hazardous substance, liquid, n.o.s.

Class:

Subsidiary risk:

UN ID #:

marine pollutant UN 3082

Packing group:

III

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Technical description

(Triflumizole)

ICAO/IATA Classification

Proper shipping name:

Environmentally hazardous substance, liquid, n.o.s.

Class:

UN ID #: Packing group: UN 3082 III

Technical description

(Triflumizole)

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 ****

Pennsylvania Right-To-Know Hazardous Substance List--Hazardous Substances and Special Hazardous Substances on the list must be identified when present in products.

Components present in this product at a level which could require reporting under the statute are:

Chemical name
1,2-Propanediol

CAS# 57-55-6 Max weight % <= 10.00

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

Chemical name Triflumizole CAS# 68694-11-1 New Jersey TS Number

1,2-Propanediol

57-55-6

Non-Hazardous Inert Ingredients

EPA Hazard Categories (SARA 311, 312):

Immediate Health Hazard

California Proposition 65

**** NONE ****

Food contact No data available.

16. OTHER INFORMATION

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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: 2	Flammability: 0	Reactivity: 0	PPI: X	
STP	Standa	ard temperature and pressure		
W/W	Weigh 0 (HM	t/Weight		
1 (HMIS)	Slight hazard			
2 (HMIS)	Moder			
3 (HMIS)	Serious hazard			Copyright
4 (HMIS)	Severe hazard			2008
X (HMIS)	Person	Chemtura Corporation		

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