



MATERIAL SAFETY DATA SHEET

Terraguard® SC

Version: 1.4
Date of Issue: 08/07/2006
Date printed: 08/07/2006

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Terraguard® SC

Chemical name: [1-[1[[4chloro-2-(trifluoromethyl)phenyl]imino]-2-propoxyethyl]-1H-imidazole

Use of substance/preparation: Fungicide

Supplier: Chemtura USA Corporation
Chemtura Corporation (Worldwide HQ)
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
For additional emergency telephone numbers see section 16 of the Safety Data Sheet.

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

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>INGREDIENT</u>	<u>% BY WEIGHT</u>
Triflumizole CAS# 68694-11-1	42.14

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

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

CAUTION!

HARMFUL IF SWALLOWED.
MAY CAUSE EYE IRRITATION.

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.



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5. FIRE-FIGHTING MEASURES

Autoignition temperature: Not available

Hazardous combustion products

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.

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



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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT VALUES

No other exposure limits have been established

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

Ventilation

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
Melting point	Not applicable
pH	7.3
Specific gravity (H ₂ O=1)	1.15
Vapor pressure	
Solubility in water	Soluble
Solubility in organic solvents	No data available.
Partitioning coefficient	Not available
Flash point	Not available



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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

Test results

Eye irritation: Species: Rabbit
Result: Slight

SENSITIZATION

Test results:

Species: - Guinea pigs
Result: Negative

MUTAGENICITY

Assessment: Negative

12. ECOLOGICAL INFORMATION



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<u>Component ecotoxicology</u> Triflumizole <u>Acute toxicity fish:</u>	LC50 - Rainbow trout (Oncorhynchus mykiss) Result: 0.58 mg/l Exposure time: 96 h
<u>Component ecotoxicology</u> Triflumizole <u>Acute toxicity fish:</u>	LC50 - Common carp (Cyprinus carpio) Result: 0.76 mg/l Exposure time: 96 h
<u>Component ecotoxicology</u> Triflumizole <u>Acute toxicity fish:</u>	LC50 - Bluegill (Lepomis macrochirus) Result: 1.2 mg/l Exposure time: 96 h
<u>Component ecotoxicology</u> Triflumizole <u>Aquatic toxicity to plants:</u>	EbC50 - Algae Result: 0.241 mg/l Exposure time: 96 h
<u>Component ecotoxicology</u> Triflumizole <u>Acute toxicity to aquatic invertebrates:</u>	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., Avoid discharge to sewers and natural waters.

14. TRANSPORT INFORMATION

DOT Classification

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

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Class: 9
UN ID #: UN3082
Packing group: III
marine pollutant: MARINE POLLUTANT

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

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

ICAO Classification

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



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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	CAS#	Max weight %
1,2-Propanediol	57-55-6	<= 10.00

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

Chemical name	CAS#	New Jersey TS Number
Triflumizole	68694-11-1	
1,2-Propanediol	57-55-6	

Non-Hazardous Inert Ingredients -

EPA Hazard Categories (SARA 311, 312): Immediate Health Hazard

California Proposition 65

**** NONE ****

FDA

Food contact
 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.

FURTHER INFORMATION

MAY BE ON THE INVENTORY LIST BUT NOT NECESSARILY REGISTERED, (Korea, China, New Zealand) CONSULT REGULATORY SPECIALIST.

HMIS RATING

Health: 2	Flammability: 0	Reactivity: 0	PPI: X
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STP	Standard temperature and pressure
W/W	Weight/Weight
1 (HMIS)	0 (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

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