

Safety data sheet

Armour

Revision date : 2009/03/18
Version: 1.0

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(130466/SDS_CPA_CA/EN)

1. Substance/preparation and company identification

Company
Viterra
2625 Victoria Avenue
Regina SK, S4T 7T9, Canada

24 Hour Emergency Response Information
CANUTEC (reverse charges): (613) 996-6666
BASF HOTLINE: (800) 454-COPE (2673)

Manufactured by:
BASF Canada

Substance number:	000000130466
Molecular formula:	C17 H20 Cl N3 O
Molecular weight:	317.82 g/mol
Synonyms:	Triticonazole

2. Hazardous ingredients

Not WHMIS controlled.

3. Hazard identification

Potential health effects

See Product Label for additional precautionary statements.

Irritation:

May cause slight irritation to the skin. May cause moderate but temporary irritation to the eyes.

Sensitization:

Skin sensitizing effects were not observed in animal studies.

4. First-aid measures

If inhaled:

Keep patient calm, remove to fresh air. Assist in breathing if necessary. Consult a physician.

If on skin:

Wash affected areas thoroughly with soap and water. Remove contaminated clothing. If irritation develops, seek medical attention.

If in eyes:

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Immediate medical attention required.

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If swallowed:

Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

5. Fire-fighting measures

Flash point: Non-flammable.
Flammability: does not ignite
Self-ignition temperature: not self-igniting

Suitable extinguishing media:

foam, dry extinguishing media, carbon dioxide, water spray

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, Hydrogen chloride, halogenated hydrocarbons, Hydrocarbons, nitrogen oxides

If product is heated above decomposition temperature, toxic vapours will be released. The substances/groups of substances mentioned can be released in case of fire.

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways.

6. Accidental release measures

Personal precautions:

Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Environmental precautions:

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water.

Cleanup:

Dike spillage. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

7. Handling and storage

Storage

General advice:

Keep away from heat. Protect against moisture. Protect from direct sunlight.

Storage incompatibility:

General: Segregate from incompatible substances. Segregate from foods and animal feeds. Segregate from textiles and similar materials.

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8. Exposure controls and personal protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

Personal protective equipment

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) TC23C Chemical/Mechanical type filter system to remove a combination of particles, gas and vapours.

Hand protection:

Chemical resistant protective gloves, Suitable materials, nitrile rubber (Buna N), chloroprene rubber (Neoprene)

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

General safety and hygiene measures:

Wash soiled clothing immediately.

9. Physical and chemical properties

Form:	liquid	
Odour:	characteristic	
Odour threshold:	No data available.	
Colour:	dark red	
pH value:	6 - 8	(10.5 g/l)
Freezing point:	approx. 0 °C	(1,013.3 hPa) Information applies to the solvent.
Boiling point:	approx. 100 °C	(1,013.3 hPa) Information applies to the solvent.
Vapour pressure:	approx. 23.3 hPa	(20 °C) Information applies to the solvent.
Density:	1.045 g/cm ³	(20 °C)
Bulk density:		not applicable
Viscosity, dynamic:	approx. > 1 mPa.s	
Solubility in water:		soluble

10. Stability and reactivity

Conditions to avoid:

Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme temperatures. Avoid prolonged exposure to extreme heat. Avoid contamination. Avoid electro-static discharge. Avoid prolonged storage.

Substances to avoid:

strong oxidizing agents, acids, bases

Hazardous reactions:

The product is chemically stable.

Hazardous polymerization will not occur. No hazardous reactions if stored and handled as prescribed/indicated.

Decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated., Prolonged thermal loading can result in products of degradation being given off.

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Oxidizing properties:

not fire-propagating

Not an oxidizer.

11. Toxicological information

Acute toxicity

Oral:

LD50/rat: > 2,000 mg/kg

Inhalation:

LC50/rat: 13 mg/l / 4 h

Dermal:

LD50/rat: > 2,000 mg/kg

Skin irritation:

rabbit: Slightly irritating.

Eye irritation :

rabbit: Slightly irritating.

Sensitization:

guinea pig: Skin sensitizing effects were not observed in animal studies.

Chronic toxicity

Other information:

Misuse can be harmful to health.

12. Ecological information

Environmental fate and transport

Biodegradation:

Evaluation: Not readily biodegradable (by OECD criteria).

Information on: Triticonazole

Test method: Directive 84/449/EEC, C.5, activated sludge, adapted

Method of analysis: CO2 formation relative to the theoretical value

Degree of elimination: 0 % (28 d)

Evaluation: Not readily biodegradable (by OECD criteria).

Information on: Triticonazole

Bioconcentration factor 72.55

Information on: Triticonazole

Acute and prolonged toxicity to fish:

EPA 72-1 Flow through.

Rainbow trout/LC50 (96 h): > 3.6 mg/l

EPA 72-1 Flow through.

sunfish, bluegill/LC50 (96 h): > 8.9 mg/l

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Information on: Triticonazole
Acute toxicity to aquatic invertebrates:
Directive 92/69/EEC, C.2 semistatic
Daphnia magna/EC50 (48 h): > 50 mg/l

13. Disposal considerations

Waste disposal of substance:

Dispose of in a licensed facility.
Observe all local regulations.

14. Transport information

Reference Bill of Lading

15. Regulatory information

Federal Regulations

Registration status:

DSL, CA

released / exempt

WHMIS does not apply to this product.

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

16. Other information

Refer to product label for EPA registration number.

MSDS created by:

BASF Canada Product Safety

prod_reg@basf.com

END OF DATA SHEET