

# SAFETY DATA SHEET



## Viatude™ Fungicide

Version 1.0      Revision Date: 02/24/2023      SDS Number: 800080100666      Date of last issue: -  
Date of first issue: 02/24/2023

Corteva Agriscience™ encourages you and expects you to read and understand the entire SDS as there is important information throughout the document. This SDS provides users with information relating to the protection of human health and safety at the workplace, protection of the environment and supports emergency response. Product users and applicators should primarily refer to the product label attached to or accompanying the product container. This Safety Data Sheet adheres to the standards and regulatory requirements of Canada and may not meet the regulatory requirements in other countries.

### SECTION 1. IDENTIFICATION

Product name : Viatude™ Fungicide  
Other means of identification : No data available

#### Manufacturer or supplier's details

#### COMPANY IDENTIFICATION

**Manufacturer/importer** : CORTEVA AGRISCIENCE CANADA COMPANY  
#2450, 215 - 2ND STREET S.W.  
CALGARY AB, T2P 1M4  
CANADA

**Customer Information Number** : 800-667-3852  
**E-mail address** : solutions@corteva.com

**Emergency telephone number** : CANUTEC  
1-888-226-8832

#### Recommended use of the chemical and restrictions on use

Recommended use : End use fungicide product

### SECTION 2. HAZARDS IDENTIFICATION

#### GHS classification in accordance with the Hazardous Products Regulations

Not a hazardous substance or mixture.

#### GHS label elements

Not a hazardous substance or mixture.

#### Other hazards

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

#### Components

Chemical name	Common Name/Synonym	CAS-No.	Concentration (% w/w)
Picoxystrobin	Picoxystrobin	117428-22-5	17.05
prothioconazole (ISO)	prothioconazole (ISO)	178928-70-6	5.68
Propanediol	Propanediol	57-55-6	>= 3 - < 10 *
Balance	Balance	Not Assigned	> 60

\* Actual concentration or concentration range is withheld as a trade secret

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### SECTION 4. FIRST AID MEASURES

- If inhaled : Move person to fresh air; if effects occur, consult a physician.
- In case of skin contact : Wash off with plenty of water.
- In case of eye contact : Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.
- If swallowed : No emergency medical treatment necessary.
- Most important symptoms and effects, both acute and delayed : None known.
- Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.
- Notes to physician : No specific antidote.  
Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

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### SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray  
Alcohol-resistant foam
- Unsuitable extinguishing media : None known.
- Specific hazards during fire-fighting : Exposure to combustion products may be a hazard to health. Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.  
Combustion products may include and are not limited to:  
Nitrogen oxides (NOx)  
Carbon oxides
- Specific extinguishing methods : Remove undamaged containers from fire area if it is safe to do so.  
Evacuate area.  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Use water spray to cool unopened containers.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.  
Use personal protective equipment.

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### SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.
- Environmental precautions : If the product contaminates rivers and lakes or drains inform respective authorities.

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Discharge into the environment must be avoided.  
Prevent further leakage or spillage if safe to do so.  
Prevent spreading over a wide area (e.g. by containment or oil barriers).  
Retain and dispose of contaminated wash water.  
Local authorities should be advised if significant spillages cannot be contained.  
Prevent from entering into soil, ditches, sewers, underwater.  
See Section 12, Ecological Information.

Methods and materials for containment and cleaning up : Clean up remaining materials from spill with suitable absorbent.  
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in.  
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped,  
Recovered material should be stored in a vented container. The vent must prevent the ingress of water as further reaction with spilled materials can take place which could lead to over-pressurization of the container.  
Keep in suitable, closed containers for disposal.  
Wipe up with absorbent material (e.g. cloth, fleece).  
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
See Section 13, Disposal Considerations, for additional information.

### SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Do not breathe vapours/dust.  
Handle in accordance with good industrial hygiene and safety practice.  
Smoking, eating and drinking should be prohibited in the application area.  
Take care to prevent spills, waste and minimize release to the environment.  
Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Conditions for safe storage : Store in a closed container.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Keep in properly labelled containers.  
Store in accordance with the particular national regulations.

Materials to avoid : Strong oxidizing agents  
Packaging material : Unsuitable material: None known.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Propanediol	57-55-6	TWA (Vapour and aerosols)	50 ppm 155 mg/m3	CA ON OEL
		TWA (aerosol)	10 mg/m3	CA ON OEL

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**Engineering measures** : Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations.  
Local exhaust ventilation may be necessary for some operations.

### Personal protective equipment

**Respiratory protection** : Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator.

**Hand protection**

**Remarks** : Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl chloride ("PVC" or "vinyl"). **NOTICE:** The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

**Eye protection** : Use safety glasses (with side shields).  
If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

**Skin and body protection** : Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

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### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** : liquid

**Colour** : off-white

**Odour** : sweet

**Odour Threshold** : No data available

**pH** : No data available

**Melting point/range** : Not applicable

**Freezing point** : No data available

**Boiling point/boiling range** : No data available  
: > 100 °C

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Flash point	Method: closed cup
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit / Upper flammability limit	: No data available
Lower explosion limit / Lower flammability limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 1.0988 g/cm <sup>3</sup> (20 °C) approximately
Solubility(ies) Water solubility	: No data available
Auto-ignition temperature	: No data available
Viscosity Viscosity, dynamic	: 770 cP ( 20 °C) 30 rpm  2,150.0 cP ( 40 °C) 30 rpm
Explosive properties	: No
Oxidizing properties	: No significant increase (>5C) in temperature.

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### SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Not classified as a reactivity hazard.
Chemical stability	: No decomposition if stored and applied as directed. Stable under normal conditions.
Possibility of hazardous reactions	: Stable under recommended storage conditions. No hazards to be specially mentioned. None known.
Conditions to avoid	: None known.
Incompatible materials	: None.
Hazardous decomposition products	: Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Nitrogen oxides (NO <sub>x</sub> ) Carbon oxides

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### SECTION 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

##### Product:

Acute oral toxicity : LD50 (Rat, female): > 2,000 mg/kg  
Method: OECD Test Guideline 423

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Acute inhalation toxicity : LC50 (Rat, male and female): > 5.3 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 436

### **Components:**

#### **Picoxystrobin:**

Acute oral toxicity : LD50 (Rat, female): > 5,000 mg/kg  
Method: OECD Test Guideline 425

Acute inhalation toxicity : LC50 (Rat, male): > 2.12 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
Remarks: The particle size (MMAD) of unmilled picoxystrobin technical material is ~228 µm, with less than 3.3% of material <4 µm, indicating unmilled picoxystrobin is not respirable and that the study results with milled technical material are not relevant to picoxystrobin in the supply chain.  
Material milled to a particle size of 3.4 - 4.1 µm MMAD

Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg  
Method: OECD Test Guideline 402

#### **prothioconazole (ISO):**

Acute oral toxicity : LD50 (Rat): > 6,200 mg/kg  
Method: OPPTS 870.1100

Acute inhalation toxicity : LC50 (Rat): > 4.990 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Assessment: The substance or mixture has no acute inhalation toxicity  
Remarks: Maximum achievable concentration.

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg  
Method: OPPTS 870.1200  
Assessment: The substance or mixture has no acute dermal toxicity

#### **Propanediol:**

Acute oral toxicity : LD50 (Rat): > 20,000 mg/kg

Acute inhalation toxicity : LC50 (Rabbit): 317.042 mg/l  
Exposure time: 2 h  
Test atmosphere: dust/mist  
Symptoms: No deaths occurred at this concentration.  
Assessment: The substance or mixture has no acute inhalation toxicity  
Remarks: Mist may cause irritation of upper respiratory tract (nose and throat).

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg  
Symptoms: No deaths occurred at this concentration.  
Assessment: The substance or mixture has no acute dermal toxicity

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### Skin corrosion/irritation

#### Product:

Species : Rabbit  
Method : OECD Test Guideline 404

#### Components:

##### **Picoxystrobin:**

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : No skin irritation

##### **prothioconazole (ISO):**

Species : Rabbit  
Result : No skin irritation

##### **Propanediol:**

Species : Rabbit  
Result : No skin irritation

### Serious eye damage/eye irritation

#### Product:

Result : No eye irritation  
Method : OECD Test Guideline 492

#### Components:

##### **Picoxystrobin:**

Species : Rabbit  
Result : Mild eye irritation  
Method : OECD Test Guideline 405

##### **prothioconazole (ISO):**

Species : Rabbit  
Result : No eye irritation  
Method : US EPA Test Guideline OPPTS 870.2400

##### **Propanediol:**

Species : Rabbit  
Result : No eye irritation

### Respiratory or skin sensitisation

#### Product:

Test Type : Local lymph node assay  
Species : Mouse  
Method : OECD Test Guideline 429

#### Components:

##### **Picoxystrobin:**

Test Type : Maximisation Test  
Species : Guinea pig  
Method : OECD Test Guideline 406  
Result : Does not cause skin sensitisation.

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### **prothioconazole (ISO):**

Species : Guinea pig  
Assessment : Does not cause skin sensitisation.  
Method : US EPA Test Guideline OPPTS 870.2600  
Remarks : Did not cause allergic skin reactions when tested in guinea pigs.

Remarks : For respiratory sensitization:  
No relevant data found.

### **Propanediol:**

Species : human  
Assessment : Does not cause skin sensitisation.

### **Germ cell mutagenicity**

#### **Components:**

##### **Picoxystrobin:**

Germ cell mutagenicity - Assessment : Weight of evidence does not support classification as a germ cell mutagen.

##### **prothioconazole (ISO):**

Germ cell mutagenicity - Assessment : In vitro genetic toxicity studies were negative., Animal genetic toxicity studies were negative.

##### **Propanediol:**

Germ cell mutagenicity - Assessment : In vitro genetic toxicity studies were negative., Animal genetic toxicity studies were negative.

### **Carcinogenicity**

#### **Components:**

##### **Picoxystrobin:**

Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

##### **prothioconazole (ISO):**

Carcinogenicity - Assessment : Did not cause cancer in laboratory animals.

##### **Propanediol:**

Carcinogenicity - Assessment : Did not cause cancer in laboratory animals.

### **Reproductive toxicity**

#### **Components:**

##### **Picoxystrobin:**

Reproductive toxicity - Assessment : No toxicity to reproduction  
Animal testing did not show any effects on foetal development.

##### **prothioconazole (ISO):**

Reproductive toxicity - Assessment : In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.



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Has caused birth defects in laboratory animals only at doses toxic to the mother., Has been toxic to the fetus in laboratory animals at doses toxic to the mother.

### Propanediol:

Reproductive toxicity - Assessment

: In animal studies, did not interfere with reproduction., In animal studies, did not interfere with fertility.  
Did not cause birth defects or any other fetal effects in laboratory animals.

### STOT - single exposure

#### Components:

#### Picoxystrobin:

Assessment

: The substance or mixture is not classified as specific target organ toxicant, single exposure.

#### prothioconazole (ISO):

Assessment

: Evaluation of available data suggests that this material is not an STOT-SE toxicant.

#### Propanediol:

Assessment

: Evaluation of available data suggests that this material is not an STOT-SE toxicant.

### STOT - repeated exposure

#### Components:

#### Picoxystrobin:

Assessment

: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

### Repeated dose toxicity

#### Components:

#### prothioconazole (ISO):

Application Route

: Ingestion

Method

: OPPTS 870.4100

Remarks

: In animals, effects have been reported on the following organs:  
Kidney.  
Liver.  
Thyroid.  
Bladder.

#### Propanediol:

Remarks

: In rare cases, repeated excessive exposure to propylene glycol may cause central nervous system effects.

### Aspiration toxicity

#### Components:

#### Picoxystrobin:

Based on physical properties, not likely to be an aspiration hazard.

#### prothioconazole (ISO):

Based on physical properties, not likely to be an aspiration hazard.

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### Propanediol:

Based on physical properties, not likely to be an aspiration hazard.

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## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Components:

#### Picoxystrobin:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 0.065 mg/l  
End point: mortality  
Exposure time: 96 h  
Test Type: Static  
Method: OECD Test Guideline 203

LC50 (Oncorhynchus mykiss (rainbow trout)): 0.075 mg/l  
End point: mortality  
Exposure time: 96 h  
Test Type: Static  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.024 mg/l  
End point: Immobilization  
Exposure time: 48 h  
Test Type: Static  
Method: OECD Test Guideline 202

EC50 (eastern oyster (Crassostrea virginica)): 0.0057 mg/l  
Exposure time: 96 h  
Test Type: flow-through test  
Method: US EPA Test Guideline OPPTS 850.1035

Toxicity to algae/aquatic plants : EC50 (Selenastrum capricornutum (green algae)): 0.0063 mg/l  
End point: Growth rate  
Exposure time: 96 h  
Test Type: Static

EyC50 (Lemna minor (duckweed)): 0.023 mg/l  
Exposure time: 7 d  
Test Type: Static

NOEC (Lemna minor (duckweed)): 0.049 mg/l  
Exposure time: 7 d  
Test Type: Static

EbC50 (Pseudokirchneriella subcapitata (green algae)): 0.26 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 100

Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): 0.01 mg/l  
Exposure time: 28 d  
Test Type: flow-through  
Method: OECD Test Guideline 204

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GLP: yes

NOEC (Cyprinodon variegatus (sheepshead minnow)): 0.021 mg/l  
Exposure time: 33 d  
Test Type: flow-through

NOEC (Pimephales promelas (fathead minnow)): 0.040 mg/l  
Exposure time: 32 d  
Test Type: flow-through

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.008 mg/l  
Exposure time: 21 d  
Method: OECD Test Guideline 202  
GLP: yes

NOEC (Americamysis bahia (mysid shrimp)): 0.0036 mg/l  
Exposure time: 28 d  
Test Type: flow-through test  
Method: OECD Test Guideline 202  
GLP: yes

M-Factor (Chronic aquatic toxicity) : 10

Toxicity to soil dwelling organisms : LC50 (Eisenia fetida (earthworms)): 6.7 mg/kg  
Method: OECD Test Guideline 207  
GLP: yes

Toxicity to terrestrial organisms : LD50 (Colinus virginianus (Bobwhite quail)): > 2,250 mg/kg  
Method: US EPA Test Guideline OPP 71-1

dietary LC50 (Colinus virginianus (Bobwhite quail)): > 5,200 mg/kg  
Exposure time: 5 d  
Method: OECD Test Guideline 205  
GLP: yes

dietary LC50 (Anas platyrhynchos (Mallard duck)): > 5,200 mg/kg  
Exposure time: 5 d  
Method: OECD Test Guideline 205  
GLP: yes

contact LD50 (Apis mellifera (bees)): > 200 µg/bee  
Exposure time: 48 h  
Method: OEPP/EPPO Test Guideline 170

oral LD50 (Apis mellifera (bees)): > 200 µg/bee  
Exposure time: 48 h  
Method: OEPP/EPPO Test Guideline 170

**prothioconazole (ISO):**

Toxicity to fish : Remarks: Material is very highly toxic to aquatic organisms on an acute basis (LC50/EC50 <0.1 mg/L in the most sensitive species).

LC50 (Rainbow trout (Oncorhynchus mykiss)): 1.83 mg/l  
Exposure time: 96 h

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- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.3 mg/l  
Exposure time: 48 h
- Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): 2.18 mg/l  
End point: Growth rate inhibition  
Exposure time: 72 h
- ErC50 (Skeletonema costatum (marine diatom)): 0.046 mg/l  
Exposure time: 72 h
- M-Factor (Acute aquatic toxicity) : 10
- Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): 0.308 mg/l  
Exposure time: 97 d
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.56 mg/l  
Exposure time: 21 d
- M-Factor (Chronic aquatic toxicity) : 10
- Propanediol:**
- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 40,613 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : LC50 (Ceriodaphnia dubia (water flea)): 18,340 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202
- Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): 19,000 mg/l  
End point: Growth rate inhibition  
Exposure time: 96 h  
Method: OECD Test Guideline 201
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Ceriodaphnia dubia (water flea)): 13,020 mg/l  
End point: number of offspring  
Exposure time: 7 d  
Test Type: semi-static test
- Toxicity to microorganisms : NOEC (Pseudomonas putida): > 20,000 mg/l  
Exposure time: 18 h

### Persistence and degradability

#### Components:

##### **Picoxystrobin:**

Biodegradability : Result: Not readily biodegradable.

##### **prothioconazole (ISO):**

Biodegradability : Result: Not readily biodegradable.  
Remarks: Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

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### Propanediol:

Biodegradability : aerobic  
Result: Readily biodegradable.  
Biodegradation: 81 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301F or Equivalent  
Remarks: 10-day Window: Pass

Biodegradation: 96 %  
Exposure time: 64 d  
Method: OECD Test Guideline 306 or Equivalent  
Remarks: 10-day Window: Not applicable

Biochemical Oxygen Demand (BOD) : 69.000 %  
Incubation time: 5 d  
  
70.000 %  
Incubation time: 10 d  
  
86.000 %  
Incubation time: 20 d

Chemical Oxygen Demand (COD) : 1.53 kg/kg  
ThOD : 1.68 kg/kg

Photodegradation : Rate constant: 1.28E-11 cm<sup>3</sup>/s  
Method: Estimated.

### Bioaccumulative potential

#### Components:

#### Picoxystrobin:

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)  
Bioconcentration factor (BCF): 290  
Exposure time: 28 d  
Temperature: 22 °C  
Concentration: 0.05 mg/l

Partition coefficient: n-octanol/water : log Pow: 3.68 (20 °C)

#### prothioconazole (ISO):

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)  
Bioconcentration factor (BCF): 19.7

Partition coefficient: n-octanol/water : log Pow: 3.82 (20 °C)  
pH: 7  
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

#### Propanediol:

Bioaccumulation : Bioconcentration factor (BCF): 0.09  
Method: Estimated.

Partition coefficient: n-octanol/water : log Pow: -1.07  
Method: Measured  
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

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### Balance:

Partition coefficient: n-octanol/water : Remarks: No relevant data found.

### Mobility in soil

#### Components:

#### Picoxystrobin:

Distribution among environmental compartments : Koc: 898  
Remarks: Under actual use conditions the product has a low potential of mobility in soil.

#### prothioconazole (ISO):

Distribution among environmental compartments : Koc: 1765  
Remarks: Potential for mobility in soil is low (Koc between 500 and 2000).

#### Propanediol:

Distribution among environmental compartments : Koc: < 1  
Method: Estimated.  
Remarks: Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.  
Potential for mobility in soil is very high (Koc between 0 and 50).

### Balance:

Distribution among environmental compartments : Remarks: No relevant data found.

### Other adverse effects

#### Components:

#### Picoxystrobin:

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

#### prothioconazole (ISO):

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

#### Propanediol:

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

### Balance:

Results of PBT and vPvB assessment : This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

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Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

### SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal methods

Waste from residues : If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.  
If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

### SECTION 14. TRANSPORT INFORMATION

#### International Regulations

##### UNRTDG

UN number : UN 3082  
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Picoxystrobin, Prothioconazole)  
Class : 9  
Packing group : III  
Labels : 9

##### IATA-DGR

UN/ID No. : UN 3082  
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.  
(Picoxystrobin, Prothioconazole)  
Class : 9  
Packing group : III  
Labels : Miscellaneous  
Packing instruction (cargo aircraft) : 964  
Packing instruction (passenger aircraft) : 964

##### IMDG-Code

UN number : UN 3082  
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Picoxystrobin, Prothioconazole)  
Class : 9  
Packing group : III  
Labels : 9  
EmS Code : F-A, S-F  
Marine pollutant : yes  
Remarks : Stowage category A

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### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### National Regulations

#### TDG

UN number : UN 3082  
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Picoxystrobin, Prothioconazole)  
Class : 9  
Packing group : III  
Labels : 9  
ERG Code : 171  
Marine pollutant : yes(Picoxystrobin, Prothioconazole)

### Further information

Marine Pollutants assigned UN number 3077 and 3082 in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code, IATA Special provision A197, and ADR/RID special provision 375.

For Canadian Ground transportation TDG Exemption: 1.45.1 Marine Pollutants (Part 3, Documentation, and Part 4, Dangerous Goods Safety Marks, do not apply if they are in transport solely on land by road vehicle or railway vehicle).

### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

## SECTION 15. REGULATORY INFORMATION

### The components of this product are reported in the following inventories:

DSL : This product contains components that are not listed on the Canadian DSL nor NDSL.

Pest Control Products Act ( PCPA ) Registration Number : 34672

Read the PCPA label, authorized under the Pest Control Products Act, prior to using or handling this pest control product.

This chemical is a pest control product registered by Health Canada Pest Management Regulatory Agency and is subject to certain labelling requirements under the Pest Control Products Act (PCPA). There are Canada-specific environmental requirements for handling, use, and disposal of this pest control product that are indicated on the label. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. Following is the hazard information required on the pest control products label:

PCPA Label Hazard Communications:  
Read the label and booklet before using.

This product is toxic to:  
Earthworms  
Certain beneficial insects  
Aquatic organisms



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### SECTION 16. OTHER INFORMATION

#### Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

#### Full text of other abbreviations

CA ON OEL : Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.  
CA ON OEL / TWA : Time-Weighted Average Limit (TWA)

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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Date format : mm/dd/yyyy

Product code: GF-4630

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.

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