SAFETY DATA SHEET

Zetigo™ PRM Fungicide

Version	Revision Date:	SDS Number:	Date of last issue: 03/29/2023
2.0	04/12/2023	800080100753	Date of first issue: 03/29/2023

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 : Zetigo™ PRM 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

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Eye irritation : Category 2A

Specific target organ toxicity - single exposure : Category 3 (Respiratory system)

GHS label elements

Hazard pictograms :

Signal word : Warning

Hazard statements : H302 + H332 Harmful if swallowed or if inhaled.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary statements :

Prevention:

P261 Avoid breathing mist or vapours.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear eye protection/ face protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/ attention.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	Common Name/Synonym	CAS-No.	Concentration (% w/w)
Florylpicoxamid	Florylpicoxamid	1961312-55-9	4.99
pyraclostrobin (ISO)	pyraclostrobin (ISO)	175013-18-0	9.98
N,N-Dimethyldecan-1-amide	N,N-Dimethyldecan-1-amide	14433-76-2	>= 30 - < 40 *
propylene carbonate	propylene carbonate	108-32-7	>= 10 - < 20 *
Polyether modified trisiloxane	Polyether modified trisiloxane	134180-76-0	>= 3 - < 10 *
Balance	Balance	Not Assigned	> 10

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

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 : Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay,

preferably from an ophthalmologist.
Suitable emergency eye wash facility should be immediately available.

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.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Water spray Alcohol-resistant foam
Unsuitable extinguishing media	:	None known.
Specific hazards during firefighting	:	Exposure to combustion products may be a hazard to health.
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: Carbon oxides Nitrogen oxides (NOx)
Specific extinguishing methods	:	Remove undamaged containers from fire area if it is safe to do so. Evacuate area. Use water spray to cool unopened containers.
Further information	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Special protective equipment for firefighters	:	Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.

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	:	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.
Methods and materials for containment and cleaning up	:	Clean up remaining materials from spill with suitable absorbant. 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 overpressurization of the container.
Keep in suitable, closed containers for disposal.
Wipe up with absorbent material (e.g. cloth, fleece).
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. Keep in properly labelled containers. Store in accordance with the particular national regulations.
Materials to avoid	:	Do not store near acids. Strong oxidizing agents
Packaging material	:	Unsuitable material: None known.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

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. In misty atmospheres, use an approved particulate respirator.
Hand protection Remarks	:	Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Chlorinated polyethylene. Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materi-

als include: Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). Viton. 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 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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Colour	:	yellow
Odour	:	mild
Odour Threshold	:	No data available
pH	:	4.37 (21.7 °C)
Melting point/range	:	Not applicable
Freezing point		No data available
Boiling point/boiling range	:	No data available
Flash point	:	> 100 °C Method: closed cup
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable to liquids
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
Relative density	:	No data available
Density	:	0.9986 g/cm3 (20 °C)
Solubility(ies)		
Water solubility	:	No data available

Auto-ignition temperature	:	236 °C Method: EC Method A15
Viscosity		
Viscosity, dynamic	:	29.9 mPa,s (20 °C) 14.8 mPa,s (40 °C)
Explosive properties	:	No Method: EC Method A.14
Oxidizing properties	:	No significant increase (>5C) in temperature.

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	:	Strong acids Strong oxidizing agents
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: Carbon oxides Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity	:	LD50 (Rat, female): 500 - 2,000 mg/kg Method: OECD Test Guideline 423
Acute inhalation toxicity	:	LC50 (Rat, male and female): > 2.4 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 436
Acute dermal toxicity	:	LD50 (Rat): 2,000 mg/kg Method: OECD Test Guideline 402 Assessment: The substance or mixture has no acute dermal toxicity Remarks: No deaths occurred at this concentration.

Components:

Florylpicoxamid:

Acute oral toxicity	:	LD50 (Rat, female): > 2,000 mg/kg Method: OECD Test Guideline 423 Symptoms: No deaths occurred at this concentration. Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity	:	LC50 (Rat, male and female): > 5.48 mg/l Exposure time: 4 h Test atmosphere: dust/mist
Acute dermal toxicity	:	LD50 Dermal (Rat, male and female): > 2,000 mg/kg

pyraclostrobin (ISO):

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	:	Remarks: Brief exposure (minutes) to easily attainable concentrations may cause serious adverse effects, even death. Mist may cause irritation of upper respiratory tract (nose and throat). LC50 (Rat): 0.58 mg/l Exposure time: 4 h Test atmosphere: dust/mist
Acute dermal toxicity	:	LD50 (Rat): > 2,000 mg/kg Assessment: The substance or mixture has no acute dermal toxicity

N,N-Dimethyldecan-1-amide:

Acute oral toxicity	:	LD50 (Rat, male and female): > 2,000 - 5,000 mg/kg
Acute inhalation toxicity	:	LC50 (Rat, male and female): > 3.551 mg/l Exposure time: 4 h Test atmosphere: dust/mist Assessment: The substance or mixture has no acute inhalation toxicity Remarks: Maximum attainable concentration.
Acute dermal toxicity	:	LD50 (Rat): > 2,000 - 5,000 mg/kg

propylene carbonate:

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg
Acute dermal toxicity	:	LD50 (Rabbit): > 3,000 mg/kg Assessment: The substance or mixture has no acute dermal toxicity

Polyether modified trisiloxane:

Acute oral toxicity	:	LD50 (Rat): > 2,000 mg/kg Method: OECD Test Guideline 401 Assessment: The substance or mixture has no acute oral toxicity
Acute inhalation toxicity	:	LC50 (Rat): 1.08 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403
Acute dermal toxicity	:	LD50 (Rat): > 2,000 mg/kg Method: OECD Test Guideline 402 Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Product:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Mild skin irritation

Components:

pyraclostrobin (ISO):

Result : Skin irritation

N,N-Dimethyldecan-1-amide:

Result : Skin irritation

propylene carbonate:

Result : No skin irritation

Polyether modified trisiloxane:

Species : Rabbit
Result : No skin irritation

Serious eye damage/eye irritation

Product:

Species : Rabbit
Method : OECD Test Guideline 405

Components:

pyraclostrobin (ISO):

Result : No eye irritation

N,N-Dimethyldecan-1-amide:

Result : Eye irritation

propylene carbonate:

Result : Eye irritation

Polyether modified trisiloxane:

Species : Rabbit
Result : Eye irritation

Respiratory or skin sensitisation

Product:

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

Components:

Florylpicoxamid:

Remarks : For skin sensitization:
Did not demonstrate the potential for contact allergy in mice.

Remarks : For respiratory sensitization:
No relevant data found.

pyraclostrobin (ISO):

Assessment	:	Does not cause skin sensitisation.
Remarks	:	Did not cause allergic skin reactions when tested in guinea pigs.
Remarks	:	For respiratory sensitization: No relevant data found.

N,N-Dimethyldecan-1-amide:

Assessment	:	Does not cause skin sensitisation.
Remarks	:	For similar material(s): Did not cause allergic skin reactions when tested in guinea pigs.
Remarks	:	For respiratory sensitization: No relevant data found.

propylene carbonate:

Assessment	:	Does not cause skin sensitisation.
Remarks	:	Did not cause allergic skin reactions when tested in humans.
Remarks	:	For respiratory sensitization: No relevant data found.

Germ cell mutagenicity

Components:

Florylpicoxamid:

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

pyraclostrobin (ISO):

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

N,N-Dimethyldecan-1-amide:

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

propylene carbonate:

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

Carcinogenicity

Components:

pyraclostrobin (ISO):

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

propylene carbonate:

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

Reproductive toxicity

Components:

Florylpicoxamid:

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

pyraclostrobin (ISO):

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

N,N-Dimethyldecan-1-amide:

Reproductive toxicity - Assessment : For similar material(s):, Has been toxic to the fetus in laboratory animals at doses toxic to the mother.

Did not cause birth defects in laboratory animals.

propylene carbonate:

Reproductive toxicity - Assessment : Did not cause birth defects or any other fetal effects in laboratory animals.

STOT - single exposure

Product:

Assessment : May cause respiratory irritation.

Components:

Florylpicoxamid:

Assessment : Available data are inadequate to determine single exposure specific target organ toxicity.

pyraclostrobin (ISO):

Assessment : May cause respiratory irritation.

N,N-Dimethyldecan-1-amide:

Assessment : May cause respiratory irritation.

propylene carbonate:

Assessment : Available data are inadequate to determine single exposure specific target organ toxicity.

Polyether modified trisiloxane:

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

STOT - repeated exposure

Product:

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

Repeated dose toxicity

Components:

Florylpicoxamid:

Remarks : No relevant data found.

pyraclostrobin (ISO):

Remarks : Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

N,N-Dimethyldecan-1-amide:

Remarks : For similar material(s):
In animals, effects have been reported on the following organs:
Eye.
Liver.
Symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed.

propylene carbonate:

Remarks : Repeated skin application to laboratory animals did not produce systemic toxicity.

Aspiration toxicity

Product:

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

Components:

Florylpicoxamid:

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

pyraclostrobin (ISO):

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

N,N-Dimethyldecan-1-amide:

Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

propylene carbonate:

Based on available information, aspiration hazard could not be determined.

Polyether modified trisiloxane:

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

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : NOEC (Oncorhynchus mykiss (rainbow trout)): 0.015 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Components:

Florylpicoxamid:

Toxicity to fish : LC50 (Rainbow trout (Oncorhynchus mykiss)): 0.01 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

LC50 (Pimephales promelas (fathead minnow)): 0.015 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates	:	EC50 (water flea Daphnia magna): 0.059 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EyC50 (Pseudokirchneriella subcapita): 1.4 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 NOEC (Lemna gibba (gibbous duckweed)): 0.152 mg/l Exposure time: 7 d
M-Factor (Acute aquatic toxicity)	:	100
Toxicity to fish (Chronic toxicity)	:	NOEC (Pimephales promelas (fathead minnow)): 0.0034 mg/l Exposure time: 28 d Method: OECD Test Guideline 210 NOEC (Cyprinodon variegatus (sheepshead minnow)): 0.0008 mg/l Exposure time: 28 d Method: OECD Test Guideline 210
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 0.0137 mg/l Exposure time: 21 d NOEC (saltwater mysid Mysidopsis bahia): 0.0008 mg/l Exposure time: 28 d
M-Factor (Chronic aquatic toxicity)	:	100
Toxicity to soil dwelling organisms	:	LC50 (Eisenia fetida (earthworms)): >6.59 mg/kg dry weight (d.w.) Exposure time: 14 d End point: mortality
Toxicity to terrestrial organisms	:	(Apis mellifera (bees)): >109.2 Exposure time: 48 h End point: Acute oral toxicity (Apis mellifera (bees)): >100 Exposure time: 48 h End point: Acute contact toxicity (Colinus virginianus (Bobwhite quail)): 2,250 mg/kg Exposure time: 14 d End point: Acute oral toxicity

pyraclostrobin (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 (Oncorhynchus mykiss (rainbow trout)): 0.0062 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0.016 mg/l Exposure time: 48 h

Toxicity to algae/aquatic plants	:	ErC50 (Pseudokirchneriella subcapitata (green algae)): > 0.843 mg/l End point: Growth rate inhibition Exposure time: 96 h
M-Factor (Acute aquatic toxicity)	:	100
Toxicity to soil dwelling organisms	:	LC50 (Eisenia fetida (earthworms)): 566 mg/kg Exposure time: 14 d
Toxicity to terrestrial organisms	:	Remarks: Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg). oral LD50 (Colinus virginianus (Bobwhite quail)): > 2,000 mg/kg oral LD50 (Apis mellifera (bees)): > 73.1 µg/bee

N,N-Dimethyldecan-1-amide:

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): 14.8 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	LC50 (Daphnia magna (Water flea)): 7.7 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	ErC50 (Pseudokirchneriella subcapitata (green algae)): 16.06 mg/l Exposure time: 72 h
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 0.079 mg/l Exposure time: 21 d

Ecotoxicology Assessment

Acute aquatic toxicity	:	Toxic to aquatic life.

propylene carbonate:

Toxicity to fish	:	Remarks: Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested). LC50 (Cyprinus carpio (Carp)): > 1,000 mg/l Exposure time: 96 h Test Type: semi-static test
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 1,000 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 or Equivalent
Toxicity to algae/aquatic plants	:	EC50 (alga Scenedesmus sp.): > 900 mg/l End point: Biomass Exposure time: 72 h Method: Method Not Specified.
Toxicity to microorganisms	:	EC50 (activated sludge): > 800 mg/l Exposure time: 30 min Method: OECD 209 Test

Polyether modified trisiloxane:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2.1 mg/l
Exposure time: 96 h

LC50 (Lepomis macrochirus (Bluegill sunfish)): 15 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.1 mg/l
Exposure time: 48 h

EC50 (Daphnia magna (Water flea)): 177 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : ErC50 (Algae (Scenedesmus subspicatus)): 152.2 mg/l
Exposure time: 72 h

Persistence and degradability

Components:

Florylpicoxamid:

Biodegradability : Result: Not readily biodegradable.
Remarks: Not readily biodegraded.

pyraclostrobin (ISO):

Biodegradability : Remarks: Material is not readily biodegradable according to OECD/EEC guidelines.

Result: Not readily biodegradable.
Biodegradation: 0 - 10 %
Exposure time: 28 d

N,N-Dimethyldecan-1-amide:

Biodegradability : Remarks: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

Result: Readily biodegradable.
Biodegradation: 66.12 %
Exposure time: 11 d
Method: OECD Test Guideline 301B or Equivalent
Remarks: 10-day Window: Pass

propylene carbonate:

Biodegradability : Result: Readily biodegradable.
Remarks: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.
Material is ultimately biodegradable (reaches > 70% mineralization in OECD test(s) for inherent biodegradability).

Biodegradation: 94 %
Exposure time: 28 d
Method: OECD Test Guideline 301E or Equivalent
Remarks: 10-day Window: Pass

Biodegradation: > 97 %
Exposure time: 28 d
Method: OECD Test Guideline 302B or Equivalent
Remarks: 10-day Window: Not applicable

ThOD : 1.25 kg/kg

Photodegradation : Test Type: Half-life (indirect photolysis)
Sensitiser: OH radicals
Concentration: 1,500,000 1/cm3
Rate constant: 3.79E-12 cm3/s
Method: Estimated.

Polyether modified trisiloxane:

Biodegradability : Result: Readily biodegradable.
Biodegradation: > 60 %
Exposure time: 28 d
Method: OECD Test Guideline 301F

Bioaccumulative potential

Components:

pyraclostrobin (ISO):

Partition coefficient: n-octanol/water : log Pow: 3.99 (22 °C)
Remarks: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

N,N-Dimethyldecan-1-amide:

Partition coefficient: n-octanol/water : log Pow: 3.44
Method: Estimated.
Remarks: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

propylene carbonate:

Partition coefficient: n-octanol/water : Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
Potential for mobility in soil is very high (Koc between 0 and 50).
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.

log Pow: -0.41
Method: Measured
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Polyether modified trisiloxane:

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

Balance:

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

Mobility in soil

Components:

pyraclostrobin (ISO):

Distribution among environmental compartments : Koc: 6000 - 16000
Remarks: Expected to be relatively immobile in soil (Koc > 5000).

N,N-Dimethyldecan-1-amide:

Distribution among environmental compartments : Koc: 351 - 630
Remarks: Potential for mobility in soil is medium (Koc between 150 and 500).

propylene carbonate:

Distribution among environmental compartments : Koc: 15
Method: Estimated.
Remarks: Potential for mobility in soil is very high (Koc between 0 and 50).
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.

Balance:

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

Other adverse effects

Components:

Florylpicoxamid:

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

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

pyraclostrobin (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.

N,N-Dimethyldecan-1-amide:

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.

propylene carbonate:

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

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

Polyether modified trisiloxane:

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

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).
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. (Pyraclostrobin)
Class	:	9
Packing group	:	III
Labels	:	9

IATA-DGR

UN/ID No.	:	UN 3082
Proper shipping name	:	Environmentally hazardous substance, liquid, n.o.s. (Pyraclostrobin)
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. (Pyraclostrobin)
Class	:	9
Packing group	:	III
Labels	:	9
EmS Code	:	F-A, S-F
Marine pollutant	:	yes
Remarks	:	Stowage category A

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. (Pyraclostrobin)
Class	:	9
Packing group	:	III
Labels	:	9
ERG Code	:	171
Marine pollutant	:	yes(Pyraclostrobin)

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 : 34701

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. Keep out of reach of children.

WARNING POISON
EYE AND SKIN IRRITANT

HARMFUL OR FATAL IF SWALLOWED
Toxic to aquatic organisms.

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

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

Revision Date	:	04/12/2023
Date format	:	mm/dd/yyyy

Product code: GF-4017

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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