



# Safety Data Sheet

Presidio® Fungicide

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Presidio® Fungicide  
**PCPA REGISTRATION NUMBER:** 30051  
**VC NUMBER(S):** 1635  
**SYNONYM(S):** Fluopicolide 4 SC  
**PRODUCT DESCRIPTION:** Fungicide

Presidio is a registered trademark of Valent U.S.A. Corporation

### MANUFACTURER/DISTRIBUTOR

VALENT CANADA, INC.  
3-728 Victoria Road South  
Guelph, Ontario N1L 1C6  
(519) 767-9262

### EMERGENCY TELEPHONE NUMBERS

HEALTH EMERGENCY OR SPILL (24 hr):  
(800) 682-5368  
TRANSPORTATION (24 hr.): CHEMTREC  
(800) 424-9300 or (202) 483-7616

### Product Information

AGRICULTURAL PRODUCTS: (800) 682-5368

The current MSDS is available through our website ([www.valent.ca](http://www.valent.ca)) or by calling the product information number(s) listed above.

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

- Caution**
- Harmful if swallowed, inhaled or absorbed through skin
  - Causes moderate eye irritation.
  - Avoid contact with eyes, skin and clothing
  - Avoid breathing vapors or spray mist.
  - Highly toxic to fish.
  - May cause long-term adverse effects in the aquatic environment.
  - Keep out of reach of children

### POTENTIAL HEALTH EFFECTS

**Acute Toxicity (Primary Routes of Exposure):** None known

**Acute Eye Contact:** This product can cause moderate eye irritation. The expected adverse health effects resulting from an exposure may include redness and possible swelling.

**Acute Skin Contact:** This product is not expected to cause allergic skin reactions. This product may cause minor skin irritation and / or short term. If exposed, the expected adverse health effects may include irritation and possibly a slight inflammation. This product is harmful if absorbed through the skin.

**Acute Ingestion:** This product is slightly toxic when ingested.

**Emergency Telephone:** (800) 682-5368  
**REVISION NUMBER:** 5

**SDS NO.:** CAN-0366  
**REVISION DATE:** 06/29/2017

**Acute Inhalation:** This product is harmful if inhaled.

**Chronic Toxicity (including cancer):** Fluopicolide Technical produced liver tumors in high dose studies in mice, but is unlikely to be carcinogenic to humans. This product is not listed as a carcinogen by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), the Occupational Safety and Health Administration (OSHA) or ACGIH.

**Developmental Toxicity (birth defects):** Fluopicolide Technical did not produce developmental effects in animal experiments.

**Reproductive toxicity:** No reproductive effects were observed in animal studies.

**Signs and Symptoms of Systemic Effects:** The information provided is based on the technical material or a similar product.

**Potentially Aggravated Medical Conditions:** None known

For complete discussion of the toxicology data from which this evaluation was made, refer to Section 11. For Ecotox/Environmental Information, refer to Section 12. For Regulatory Information, refer to Section 15.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%	Purpose
Fluopicolide	239110-15-7	38 - 41	Active ingredient
Propylene glycol	57-55-6	3 - 7	Solvent
Others	Various CAS#s	52 - 59	Other Ingredients

Other ingredients, which are maintained as trade secrets, are any substances other than an active ingredient contained in this product. Some of these may be hazardous, but their identity is withheld because they are considered trade secrets. The hazards associated with the other ingredients are addressed in this document. Specific information on other ingredients for the management of exposures, spills, or safety assessments can be obtained by a treating physician or nurse by calling **(800) 682-5368** at any time.

### 4. FIRST AID MEASURES

#### EMERGENCY NUMBER (800) 682-5368

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact **1-800-682-5368** for emergency medical treatment information.

#### Eye contact:

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

#### Skin contact:

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

#### Ingestion:

Call a poison control centre or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control centre 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 centre or doctor for further treatment advice.

**Notes to physician:**

Treatment is supportive and symptomatic.

**5. FIRE FIGHTING MEASURES**

**FLASH POINT:** >100° C (212° F)  
**AUTOIGNITION:** > 470° C (878° F) (This product is not self-ignitable.)  
**EXTINGUISHING MEDIA:** Water fog, carbon dioxide, foam, sand  
**FLAMMABLE LIMITS IN AIR - LOWER (%):** Not applicable  
**FLAMMABLE LIMITS IN AIR - UPPER (%):** Not applicable

**NFPA Rating:**  
 Health: 1  
 Flammability: 0  
 Reactivity: 0  
 Special: None

(Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using professional judgement. Values were not available in the guidelines or published evaluations prepared by the National Fire Protection Association, NFPA.

**Fire fighting instructions:** Products of combustion from fires involving this material may be toxic. Avoid breathing smoke and mists. Avoid personnel and equipment contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Decontaminate personal protective equipment and fire fighting equipment before reuse.

**6. ACCIDENTAL RELEASE MEASURES**

**VALENT EMERGENCY PHONE NUMBER: (800) 682-5368**  
**CHEMTREC EMERGENCY PHONE NUMBER: (800) 424-9300**  
**OBSERVE PRECAUTIONS IN SECTION 8: PERSONAL PROTECTION**  
 Stop the source of the spill if safe to do so. Contain the spill to prevent further contamination of the soil, surface water, or ground water. For additional spill response information refer to the **North American Emergency Response Guidebook.**

**UN/NA Number:** Not applicable      **Emergency Response Guidebook No.:** Not applicable  
**FOR SPILLS ON LAND:**

**CONTAINMENT:** Avoid runoff into storm sewers and ditches which lead to waterways. Contain spilled liquids with dry sorbents.

**CLEANUP:** Clean up spill immediately. Absorb spill with inert material (such as dry sand or earth), then place in a chemical waste container. Wash area with soap and water. Pick up wash liquid with additional absorbent and place in a chemical waste container.

**FOR SPILLS IN WATER:**

**CONTAINMENT:** This material will disperse or dissolve in water. Stop the source of the release. Contain and isolate to prevent further release into soil, surface water and ground water.

**CLEANUP:** Clean up spill immediately. Absorb spill with inert material. Remove contaminated water for treatment or disposal.

**7. HANDLING AND STORAGE**

**END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.**

**Handling:**

Keep pesticide in original container. Do not store or transport near food or feed. Do not contaminate food or feed. Do not put concentrate into food or drink containers. Do not dilute concentrate in food or drink containers.

**Storage:**

Do not contaminate water, food or feed by storage or disposal. Keep pesticide in original container only. Store in a cool, dry, secure place. Do not put concentrate into food or drink containers. Do not dilute concentrate in food or drink containers. Not for use or storage in or around the home. Do not store at temperatures below 32°F (0°C). If the product is exposed to temperatures below 32°F (0°C), thaw at room temperature to 50°F (10°C) or warmer and shake gently to unify the product.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.**

**EYES & FACE:** Do not get this material in your eyes. Eye contact can be avoided by wearing protective eyewear.

**RESPIRATORY PROTECTION:** Use this material only in well ventilated areas. Unless ventilation is adequate to keep airborne concentrations below recommended exposure standards, approved respiratory protection should be worn.

**SKIN & HAND PROTECTION:** Avoid contact with skin or clothing. Skin contact can be minimized by wearing protective clothing including gloves. Remove soiled clothing immediately and wash before re-use. Avoid contact with the skin and the eyes. Wash hands before breaks and at the end of the day. Garments that cannot be cleaned must be destroyed (burned).

**Exposure limits**

Chemical Name	Canadian OELs
Fluopicolide	none
Propylene glycol	50 ppm (V) 155 mg/m <sup>3</sup> (V) 10 mg/m <sup>3</sup> (H)(b)
Others	none

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>PHYSICAL FORM:</b>	Aqueous Flowable
<b>COLOUR:</b>	beige
<b>ODOUR:</b>	Odourless
<b>FLASH POINT:</b>	>100° C (212° F)
<b>Density:</b>	10.1 lb/gal
<b>VAPOUR PRESSURE:</b>	8.03 x 10 <sup>-7</sup> Pa @ 25° C (Fluopicolide TG)
<b>pH:</b>	7.0 - 8.5
<b>SOLUBILITY:</b>	Dispersible in water

**10. STABILITY AND REACTIVITY**

<b>Chemical stability:</b>	Stable at normal ambient temperatures.
<b>Incompatibility:</b>	None known
<b>Oxidation/Reduction properties:</b>	No chemical incompatibility in contact with reducing (zinc powder) or oxidizing (ammonium nitrate) agents.
<b>Explosibility:</b>	No shock sensitivity or thermal sensitivity to explosion. Not

explosive.

**11. TOXICOLOGICAL INFORMATION**

**Acute toxicity:**

The following information is for this product formulation.

Oral Toxicity LD <sub>50</sub> (rats)	> 2,000 mg/kg	EPA Tox Category	III
Dermal Toxicity LD <sub>50</sub> (rats)	> 4,000 mg/kg	EPA Tox Category	III
Inhalation Toxicity LC <sub>50</sub> (rats)	> 1.789 mg/L	EPA Tox Category	III
Eye Irritation (rabbits)	Moderately irritating	EPA Tox Category	III
Skin Irritation (rabbits)	Non-irritating	EPA Tox Category	IV
Skin Sensitization (guinea pigs)	Non-sensitizer (Buehler)	EPA Tox Category	Not applicable

**CARCINOGEN CLASSIFICATION**

Chemical Name	IARC - Group 1 (carcinogenic to humans)	IARC - Group 2A (Probably carcinogenic)	IARC - Group 2B (Possibly carcinogenic)	NTP Carcinogen List
Fluopicolide	no	no	no	Not listed
Propylene glycol	no	no	no	Not listed
Others	No	No	No	Not listed

**Chronic/Carcinogenicity:** The liver and kidney are target organs in high dose animal experiments. Fluopicolide Technical did not cause cancer in rats, but produced benign liver tumors in mice at the maximum tolerated dose. The mechanism of liver tumor formation in the mouse is believed to be not relevant to humans.

**Developmental Toxicity:** Fluopicolide Technical did not cause any teratogenic effects in animal experiments. Ingestion of excessive amounts by pregnant animals resulted in maternal and fetal toxicity.

**Reproduction:** No indications of reprotoxic effects were observed in reproduction studies in animals.

**Mutagenicity:** Fluopicolide Technical is not genotoxic.

For a summary of the potential for adverse health effects from exposure to this product, refer to Section 2. For information regarding regulations pertaining to this product, refer to Section 15.

**12. ECOLOGICAL INFORMATION**

**AVIAN TOXICITY:**

Based upon EPA designation, fluopicolide technical is practically non-toxic to avian species. The following results were obtained from studies with fluopicolide technical:

- Oral LD<sub>50</sub> mallard duck: greater than 2250 mg/kg
- Dietary LC<sub>50</sub> bobwhite quail: greater than 5620 ppm
- Dietary LC<sub>50</sub> mallard duck: greater than 5620 ppm

**AQUATIC ORGANISM TOXICITY:** Based upon EPA designation, flupicolide technical may be highly toxic to aquatic organisms. The following are results of tests with fluopicolide technical:

- Rainbow trout 96-hr LC<sub>50</sub> : = 0.36 mg/L
- Sheepshead minnow 96-hr LC<sub>50</sub> : = 0.41 mg/L
- Daphnia 48-hr LC<sub>50</sub> : > 1.8 mg/L
- Fathead minnow Chronic NOEC = 0.155 mg/L

Daphnia Chronic NOEC = 0.37 mg/L  
 Algae (Pseudokirchneriella) 72-hr LC<sub>50</sub>: > 4.3 mg/L  
 Bioaccumulation, Bluegill sunfish: BCF 117

**OTHER NON-TARGET ORGANISM TOXICITY:**

Fluopicolide technical is practically non-toxic to bees. The acute contact LC50 in bees was greater than 100 µg/bee.

**13. DISPOSAL CONSIDERATIONS**

**END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.**

**Disposal methods:** Check government regulations and local authorities for approved disposal of this material. Dispose in accordance with applicable laws and regulations. Do not contaminate water, food or feed by disposal. Do not reuse empty container. This is a recyclable container and is to be disposed of at a container collection site. Before taking the container to a collection site; triple- or pressure-rinse the empty container and make the empty container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

**14. TRANSPORTATION INFORMATION**

**DOT (ground) shipping name:** Not regulated for domestic ground transport by US DOT or Canada TDG.  
**Emergency Response Guidebook No.:** Not applicable

**ICAO/IATA proper shipping name:** UN 3082 Environmentally Hazardous Substance, Liquid, N.O.S. (Fluopicolide), 9, III, Marine Pollutant  
**Remarks:** Single or inner packaging less than 5 L (liquids) or 5 kg net (solids) excepted from Dangerous Goods regulations -- see IATA Special Provision A197. For U.S. shipping, Emergency Response Guidebook No. 171.

**IMDG proper shipping name:** UN 3082 Environmentally Hazardous Substance, Liquid, N.O.S. (Fluopicolide), 9, III, Marine Pollutant  
**Remarks:** •Single or inner packaging less than 5 L (liquid) or 5 Kg net (solids) excepted from Dangerous Goods regulations – see IMDG 2.10.2.7  
 •For US shipping, Emergency Response Guidebook No. 171

**EMS No.:** F-A, S-F

**15. REGULATORY INFORMATION**

**CANADIAN REGULATIONS:**

**WHMIS Hazard Class:** This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations (CPR)* and the SDS contains all information required by the CPR.

**Propylene glycol**  
 Canada DSL Inventory List - Present  
 EINECS Inventory List - Present  
**Others**  
 Canada NDSL Inventory List - Not listed/Not Determined

For information regarding potential adverse health effects from exposure to this product, refer to Sections 2 and 11.

**PESTICIDE REGULATIONS:** All pesticides are governed under PCPA (Pest Control Products Act). Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

**PROVINCIAL REGULATIONS:** This product did not trigger any provincial regulations.

**16. OTHER INFORMATION**

<b>REASON FOR ISSUE:</b>	Review and update SDS.
<b>SDS NO.:</b>	CAN-0366
<b>PCPA REGISTRATION NUMBER:</b>	30051
<b>REVISION NUMBER:</b>	5
<b>REVISION DATE:</b>	06/29/2017
<b>SUPERCEDES DATE:</b>	April, 21, 2011
<b>RESPONSIBLE PERSON(S):</b>	Valent U.S.A. LLC, Corporate EH&S, (925) 256-2803

The information provided in this Safety Data Sheet (SDS) is provided in good faith and believed to be accurate at the time of preparation of the SDS. However, to the extent consistent with applicable law, Valent Canada, Inc. and its subsidiaries or affiliates extend no warranties, make no representations, and assume no responsibility as to the accuracy, suitability, or completeness of such information. Additionally, to the extent consistent with applicable law, neither Valent Canada, Inc. nor any of its subsidiaries or affiliates represents or guarantees that this information or product may be used without infringing the intellectual property rights of others. Except to the extent a particular use and particular information are expressly stated on the product label, it is the users' own responsibility to determine the suitability of this information for their own particular use of this product. If necessary, contact Valent Canada, Inc. to confirm that you have the most current product label and SDS.

The Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE PMRA-APPROVED PRODUCT LABEL (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use.

The product label provides information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products is regulated by the PMRA under the authority of the *Pest Control Products Act* through the product label. All necessary hazard classification and appropriate precautionary use, storage, and disposal information is set forth on that label or labeling accompanying the pesticide or to which reference is made on the label. It is a violation of federal law to use a PMRA-registered pesticide product in any manner inconsistent with its labeling.

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