



Safety Data Sheet (GHS)

1. IDENTIFICATION

Product identifier

PRODUCT NAME: SureGuard EZ Herbicide

PCPA REGISTRATION NUMBER: 34035

VC NUMBER(S): Not Established

Synonyms: None

PRODUCT DESCRIPTION: Herbicide

MANUFACTURER/DISTRIBUTOR
 VALENT CANADA, INC.
 Unit 201 230 Hanlon Creek Blvd.
 Guelph, Ontario N1C 0A1
 (519) 767-9262
 www.valent.ca

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

2. HAZARDS IDENTIFICATION

Classification: Per WHMIS 2015

This product has been classified under the Guidelines of 2015 Health Canada requirements and the implementation of the GHS (Revision 5) under HPR and the HPA.

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Reproductive toxicity	Category 2
Specific Target Organ Toxicity Repeated Exposure (Bone Marrow)	Category 2

Label elements



WARNING

Hazard statements

Harmful if inhaled.
 Suspected of damaging fertility or the unborn child.
 May cause damage to bone marrow.

Precautionary Statements - Prevention

Do not breathe fume/mist/vapours/spray.
 Use only outdoors or in a well-ventilated area.
 Obtain, read and follow all safety instructions before use.
 Wear protective gloves/protective clothing/eye protection/face protection.
 Wash hands and face thoroughly after handling.
 Do not eat, drink or smoke when using this product.

Precautionary Statements - Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 Get medical help.
 IF EXPOSED OR CONCERNED: Get emergency medical help immediately.

Precautionary Statements - Storage

Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local regulations.

Hazards not otherwise classified (HNOC)

Very toxic to aquatic life.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Flumioxazin	103361-09-7	41.4	-	-
Others	Various CAS#s	58.6	-	-

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

General advice Show this safety data sheet to the doctor in attendance.

Move the person to fresh air. If the 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.

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

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.

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

Most important symptoms and effects, both acute and delayed

Symptoms: No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Water fog, carbon dioxide, foam, dry chemical.
Large Fire	Do NOT use water jet or straight streams.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the compound:	Will not burn but if involved in a fire toxic fumes may be evolved. 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. Read the entire document.
Hazardous combustion products	Thermal decomposition or combustion may product harmful/irritant gas or fume such as nitrogen oxides, carbon oxides, hydrogen fluoride or organic compounds.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Methods and material for containment and cleaning up

Methods for containment Avoid runoff into storm sewers and ditches which lead to waterways, or other bodies of water. Contain spilled liquids with dry sorbents.

Methods for cleaning up 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. Vacuum or sweep up sorbent material and place into chemical waste container.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wearsuitable respiratory equipment. Do not eat, drink or smoke when using this product. Washthoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and shoes immediately. Then wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep/store only in original container. Keep out of the reach of children. Do not contaminate food or feed stuffs. Do not put formulation or dilute spray solution into food or drink containers. Store locked up.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****Exposure Limits**

Chemical name	Alberta	British Columbia	Ontario	Quebec
Propylene glycol	None	None	TWA: 10 mg/m ³ TWA: 50 ppm TWA: 155 mg/m ³	None

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear chemical-resistant gloves.

Skin and body protection Mixer/Loader/Clean-up and Repair (open cab) requires cotton overalls over long-sleeved shirt, pants, socks and shoes.

Mixer/Loader/Clean-up and Repair (closed cab) requires chemical-resistant overalls over long-sleeved shirt, long pants, sock and shoes.

Application with a backpack/manually-pressurized handwand or with a groundboom (open or closed cab) requires long-sleeved shirt, long pants, socks and shoes.

Application with a Right-of-Way sprayer or with a Mechanically-pressurized handgun requires chemical-resistant overalls over long-sleeved shirt, pants, socks and shoes.

Respiratory protection No respiratory protection is required, except when using a mechanically-pressurized handgun for application. An appropriate NIOSH-approved cartridge or canister is then required, as described on the label.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:		Vapor pressure	Not determined
Physical State	Milky Liquid	Vapor density	Not determined
Colour	Off-White	Specific Gravity	Not determined

Odour	Moderately sour	Water solubility	Not determined
pH	6.4 @ 25°C (1% w/w)	Solubility in other solvents	Not determined
Melting point / freezing point	Not determined	Partition coefficient	Not determined
Boiling point / boiling range	Not determined	Autoignition temperature	Not determined
Flash point	Not determined	Decomposition temperature	Not determined
Evaporation rate	Not determined	Viscosity	487.2 cPs @ 24° C 266.8 cPs @ 43° C
Flammability (solid, gas)	Not determined	Explosive properties	Not determined
Flammability Limits in Air:		Oxidizing properties	Not determined
Upper flammability limits	Not determined	Liquid Density	1.157 g/ml
Lower flammability limits	Not determined	Bulk density RELATIVE	Not determined

10. STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of Hazardous Reactions	None under normal processing.
Conditions to avoid	None known based on information supplied.
Incompatible materials	Oxidizing agents.
Hazardous Decomposition Products:	Thermal decomposition or combustion may product harmful gas or fume such as nitrogen oxides, carbon oxides, hydrogen fluoride or organic compounds.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

Oral Toxicity LD 50 (rats)	>5000 mg/kg	EPA Tox Category	IV
Dermal Toxicity LD 50 (rabbits)	>5000 mg/kg	EPA Tox Category	IV
Inhalation Toxicity LC 50 (rats)	>2.10 mg/m ³	EPA Tox Category	IV
Eye Irritation (rabbits)	Non-irritating	EPA Tox Category	IV
Skin Irritation (rabbits)	Slightly irritating	EPA Tox Category	IV
Skin Sensitization (guinea pigs)	Non-sensitizer (LLNA)	EPA Tox Category	Not applicable

CARCINOGEN CLASSIFICATION

Chemical name	IARC	OSHA - Select Carcinogens	NTP Carcinogen List
None	Not listed	Not listed	Not listed

TOXICITY OF FLUMIOXAZIN TECHNICAL:

Subchronic: Flumioxazin Technical in rats the lowest no-observable-effect-level (NOEL) in subchronic studies was 30 ppm in the three-month toxicity study in rats.

Chronic/Carcinogenicity: In a one-year dog feeding study, the NOEL is 10 mg/kg/day. There was no evidence of any treatment-related oncogenic effect. The NOEL for this study is 300 ppm. Dietary administration of Flumioxazin Technical for 24 months in rats no evidence of an oncogenic effect was observed. The NOEL for this study is 50 ppm.

Developmental Toxicity: Flumioxazin no developmental toxicity was noted in rabbits at doses up to 3000 mg/kg/day, a dose well above the maternal NOEL of 1000 mg/kg/day. Mechanistic studies indicate that the effects seen in the rat are highly unlikely to occur in the human and that flumioxazin would not be a developmental toxicant in the human.

Reproduction: Reproductive toxicity was observed in F1 males, P1 females and F1 females at 300 ppm Flumioxazin Technical, the highest dose tested and a dose that also produced signs of systemic toxicity. Toxicity was also observed in the F1 and F2 offspring at doses of 200 ppm and greater.

Mutagenicity: Flumioxazin Technical was not mutagenic in most *in vitro* assays: gene mutation and a chromosome aberration assay in the absence of metabolic activation. In three *in vivo* assays, chromosome aberration, unscheduled DNA synthesis and micronucleus assay, Flumioxazin Technical was not mutagenic. The only positive response was observed in the *in vitro* chromosome aberration assay in the presence of metabolic activation. Overall, Flumioxazin Technical does not present a genetic hazard.

Specific Target Organ Toxicity - repeated exposure Cat 2 - Rat 90-day repeated dose toxicity study: Bone marrow.

12. ECOLOGICAL INFORMATION

AVIAN TOXICITY: Based upon EPA designation, Flumioxazin Technical is practically non-toxic to avian species. The following results were obtained from studies with Flumioxazin Technical:
 Oral LD50 Bobwhite Quail: greater than 2,250 ppm
 Oral LD50 Mallard Duck: greater than 2,250 ppm
 Dietary LC50 Bobwhite Quail: greater than 5,620 ppm
 Dietary LC50 Mallard Duck: greater than 5,620 ppm

AQUATIC ORGANISM TOXICITY: Based upon EPA designation, Flumioxazin Technical is slightly to moderately toxic to freshwater fish; moderately toxic to freshwater invertebrates; moderately toxic to estuarine/marine fish and moderately to highly toxic estuarine/marine invertebrates, based on the following tests:
 96-hour LC50 rainbow trout: 2.3 mg/L
 96-hour LC50 bluegill sunfish: > 21 mg/L
 48-hour LC50 Daphnia magna: > 5.5 mg/L

OTHER NON-TARGET ORGANISM TOXICITY: Flumioxazin Technical is practically non-toxic to bees. The acute contact LC50 in bees was > 105 µg/bee.

13. DISPOSAL CONSIDERATIONS

Waste from residues/unused Products Canadian formulators using this product should dispose of unwanted active ingredient and containers in accordance with municipal or provincial regulations. For information on disposal or unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

Contaminated packaging Do not reuse empty containers. Triple- or pressure-rinse the container. Add the rinsings to the spray mixture in the tank. 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.

ICAO/IATA proper shipping name: UN3082 Environmentally Hazardous Substance, Liquid, N.O.S. (Flumioxazin), 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.

IMDG proper shipping name: UN3082 Environmentally Hazardous Substance, Liquid, N.O.S. (Flumioxazin), 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

15. REGULATORY INFORMATION

PMRA LABEL INFORMATION:

Pesticide products in Canada are registered by Pest Management Regulatory Agency (PMRA) and are subject to certain labeling requirements under federal pesticide law. The label, as specified in the *Pest Control Products Act* (PCPA), is the main document to be followed for safety, use, and handling. These label requirements may differ from the classification criteria and hazard information required under WHMIS GHS for the data sheets and for workplace labels of non-pesticide chemicals. The following hazard information is required on the product label:

PMRA SIGNAL WORD: • No Signal Word Assigned

PMRA pesticide label hazard information: Keep out of reach of children. Avoid breathing dust or spray mist. Avoid contact with eyes, skin and clothing.

Chemical name	Canada - WHMIS - Ingredient Disclosure List
Others	Non-controlled

Chemical name	Canada DSL Inventory List	Canada NDSL Inventory List -	EINECS Inventory List -
Propylene glycol	Present		Present

PESTICIDE REGULATIONS: All pesticides are governed under PCPA. 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

REASON FOR ISSUE: New
SDS NO.: CAN-0577
PCPA REGISTRATION NUMBER: 34035
REVISION NUMBER: 0
REVISION DATE: 04/28/2021
SUPERCEDES DATE: --/--/----
RESPONSIBLE PERSON(S): Valent U.S.A. LLC, Corporate EH&S

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

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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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