



**DuPont™ BL3 Herbicide**

Version 2.1

Revision Date 08/19/2014

Ref. 130000036262

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : DuPont™ BL3 Herbicide  
Tradename/Synonym : Flumioxazin: 2-[7-fluoro-3,4-dihydro-3-oxo-4-(2-propynyl)-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1H-isoindole-1,3(2H)-dione  
MSDS Number : 130000036262  
Product Use : Herbicide  
Manufacturer : DuPont  
1007 Market Street  
Wilmington, DE 19898  
Product Information : 1-800-441-7515 (outside the U.S. 1-302-774-1000)  
Medical Emergency : 1-800-441-3637 (outside the U.S. 1-302-774-1139)  
Transport Emergency : CHEMTREC: +1-800-424-9300 (outside the U.S. +1-703-527-3887)

**SECTION 2. HAZARDS IDENTIFICATION**

Emergency Overview

Caution

Harmful if absorbed through the skin or inhaled. Causes moderate eye irritation. Avoid breathing dust or spray mist. Avoid contact with skin, eyes and clothing.

This product is toxic to: Aquatic invertebrates

Potential Health Effects

This section includes potential acute adverse effects which could occur if this material is not used according to the label.

Skin

Flumioxazin : May cause: slight irritation, Redness, Swelling, Information given is based on data obtained from similar substances..

Eyes



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Flumioxazin : May cause: Moderate eye irritation, Redness, Swelling, Information given is based on data obtained from similar substances..

Inhalation  
Flumioxazin : May cause: Respiratory tract irritation, Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough., nasal effects, Information given is based on data obtained from similar substances..

Ingestion  
Flumioxazin : Prolonged contact may cause: Abnormal liver function, Abnormal serum enzyme levels, anemia, Information given is based on data obtained from similar substances..

Carcinogenicity  
None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS-No.	Concentration
Flumioxazin	103361-09-7	51 %
Other Ingredients		49 %

**SECTION 4. FIRST AID MEASURES**

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



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- 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 center or doctor for treatment advice.
- Inhalation : Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.
- Ingestion : Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Do not give anything by mouth to an unconscious person.
- General advice : Have the product container or label with you when calling a poison control center or doctor, or going for treatment.  
For medical emergencies involving this product, call toll free 1-800-441-3637. See Label for Additional Precautions and Directions for Use.

**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Water spray, Foam, Dry chemical, Carbon dioxide (CO2)
- Unsuitable extinguishing media : High volume water jet, (contamination risk)
- Firefighting Instructions : Wear full protective clothing and self-contained breathing apparatus. (on small fires) If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. Cool containers/tanks with water spray.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

- Safeguards (Personnel) : Evacuate personnel, thoroughly ventilate area, use self-contained breathing apparatus. Use personal protective equipment.
- Spill Cleanup : Sweep up and shovel into suitable containers for disposal.



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Accidental Release Measures : Prevent material from entering sewers, waterways, or low areas. Never return spills in original containers for re-use. Dispose of in accordance with local regulations.

**SECTION 7. HANDLING AND STORAGE**

- Handling (Personnel) : Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing/PPE immediately if material gets inside. Wash thoroughly and put on clean clothing.
- Handling (Physical Aspects) : Keep away from heat and sources of ignition.
- Storage : Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in original container. Store in a cool, dry place. Not for use or storage in or around the home. Keep out of the reach of children.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

- Engineering controls : Ensure adequate ventilation.
- Personal protective equipment
  - Respiratory protection : Where there is potential for airborne exposures in excess of applicable limits, wear approved respiratory protection with dust/mist cartridge.
  - Eye protection : Wear protective eyewear to prevent contact with this substance.
  - Skin and body protection : Applicators and other handlers must wear:
    - Long sleeved shirt and long pants
    - Chemical resistant gloves made of any waterproof material, such as polyethylene or polyvinyl chloride.
    - Shoes plus socks
    - PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:
      - Coveralls
      - Chemical resistant gloves made of any waterproof material
      - Shoes plus socks


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Protective measures : Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Use this product in accordance with its label.

**Exposure Guidelines  
Exposure Limit Values**
**Kaolin**

Permissible exposure limit:	(OSHA)	5 mg/m <sup>3</sup>	8 hr. TWA Respirable fraction.
Permissible exposure limit:	(OSHA)	15 mg/m <sup>3</sup>	8 hr. TWA Total dust.
TLV	(ACGIH)	2 mg/m <sup>3</sup>	TWA Respirable fraction.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Form	: solid, water dispersible granules
Color	: light brown
Odor	: slight
pH	: 5.4 at 25 °C (77 °F)
Oxidising Substance	: The product is not oxidizing.
Bulk density	: 0.49 g/cm <sup>3</sup>
Water solubility	: dispersible

**SECTION 10. STABILITY AND REACTIVITY**

Stability	: Stable at normal temperatures and storage conditions.
Conditions to avoid	: None reasonably foreseeable.
Incompatibility	: Strong oxidizing agents
Hazardous reactions	: Polymerization will not occur.



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**SECTION 11. TOXICOLOGICAL INFORMATION**

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- Inhalation 4 h LC50 : 0.969 mg/l , Rat  
Information given is based on data obtained from similar substances.
- Dermal LD50 : > 2,000 mg/kg , Rabbit  
Information given is based on data obtained from similar substances.
- Oral LD50 : > 5,000 mg/kg , Rat  
Information given is based on data obtained from similar substances.
- Skin irritation : slight irritation, Rabbit
- Eye irritation : slight irritation, animals (unspecified species)  
Information given is based on data obtained from similar substances.
- Sensitisation : Animal test did not cause sensitization by skin contact., animals (unspecified species)  
Information given is based on data obtained from similar substances.

Flumioxazin

- Repeated dose toxicity : Oral  
Rat  
  
altered hematology, Organ weight changes  
  
Oral  
Dog  
  
Prolonged blood-clotting time, altered blood chemistry, Increased liver weight, Liver effects
- Carcinogenicity : Animal testing did not show any carcinogenic effects.
- Mutagenicity : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.  
Did not show mutagenic effects in animal experiments.
- Reproductive toxicity : Experiments have shown reproductive toxicity effects on laboratory



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animals.

Presumed human reproductive toxicant

**SECTION 12. ECOLOGICAL INFORMATION**

Aquatic Toxicity  
Flumioxazin

- 96 h LC50 : Oncorhynchus mykiss (rainbow trout) 2.3 mg/l
- 96 h LC50 : Lepomis macrochirus (Bluegill sunfish) > 21 mg/l
- 96 h LC50 : Cyprinodon variegatus (sheepshead minnow) > 4.7 mg/l
- 48 h LC50 : Daphnia magna (Water flea) 5.5 mg/l
- 96 h LC50 : Americamysis bahia (mysid shrimp) 0.23 mg/l

Additional ecological information : Environmental Hazards: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Run-off from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not apply where/when conditions favour runoff. Do not apply where weather conditions favour drift from areas treated. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate. See product label for additional application instructions relating to environmental precautions.

**SECTION 13. DISPOSAL CONSIDERATIONS**

- Waste Disposal : Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.
  - Container Disposal : Container Refilling and Disposal:  
Refer to the product label for instructions.  
Do not transport if this container is damaged or leaking.
- In the event of a major spill, fire or other emergency, call 1-800-441-3637 day



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or night.

**SECTION 14. TRANSPORT INFORMATION**

IATA_C	UN number	: 3077
	Proper shipping name	: Environmentally hazardous substance, solid, n.o.s. (Flumioxazin)
	Class	: 9
	Packing group	: III
	Labelling No.	: 9MI
IMDG	UN number	: 3077
	Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Flumioxazin)
	Class	: 9
	Packing group	: III
	Labelling No.	: 9
	Marine pollutant	: yes (Flumioxazin)

Not regulated as a hazardous material by DOT.

**SECTION 15. REGULATORY INFORMATION**

SARA 313 Regulated Chemical(s)	: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
Title III hazard classification	: Acute Health Hazard: Yes Chronic Health Hazard: Yes Fire: No Reactivity/Physical hazard: No Pressure: No
EPA Reg. No.	: 59639-99-352 In the United States this product is regulated by the US Environmental Protection Agency (EPA) under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). It is a violation of Federal law to use this product in





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a manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA.

California Prop. 65 : Chemicals known to the State of California to cause cancer, birth defects or any other harm: none known

PA Right to Know Regulated Chemical(s) : Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for Special Hazardous Substances): Kaolin

**SECTION 16. OTHER INFORMATION**

NFPA

Health	:	1
Flammability	:	1
Reactivity/Physical hazard	:	0

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Contact person : DuPont Crop Protection, Wilmington, DE, 19898, Phone: 1-888-638-7668

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