



LONGWIND CROPSCIENCE USA LLC  
ADD: 1207 DELAWARE AVE, SUITE 886, WILMINGTON  
DE 19806, UNITED STATES

## SAFETY DATA SHEET

### SECTION 1 | PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** FLAIL 51% WDG ( Flumioxazin 51% WDG )

**EPA Reg. No.:** 95055-14-103087

**Product Type:** Herbicide

**Company Name:**

Longwind Cropsience USA LLC.

1207 DELAWARE AVE, SUITE 886, WILMINGTON, DE 19806, UNITED STATES

**Emergency Information:** In the event of a leak, fire or medical emergency involving a human or animal please call INFOTRAC at 1-800-535-5053 or Outside the USA and Canada at 1-352-323-3500, 24/7/365.

### SECTION 2 | HAZARDS IDENTIFICATION

#### PHYSICAL HAZARDS:

None

#### HEALTH HAZARDS:

Acute oral toxicity: Category 5

Acute dermal toxicity: Category 5

Inhalation: Category 4

Reproductive Toxicity: Category 2

#### ENVIRONMENTAL HAZARDS:

Hazardous to aquatic environment, acute Category 1

Hazardous to aquatic environment, chronic Category 1

#### PICTOGRAMS:



**SIGNAL WORD:** Caution

#### HAZARD STATEMENTS



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May be harmful if swallowed  
May be harmful if in contact with skin  
Harmful if inhaled  
Very toxic to aquatic life  
Very toxic to aquatic life with long lasting effects.

#### **PRECAUTIONARY STATEMENTS**

Avoid breathing mists, vapors or spray. Use only outdoors or in a well-ventilated area.  
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Avoid release to the environment.  
If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center if you feel unwell. See product label and Section 4 for emergency medical advice/attention.  
If exposed or concerned: Get medical advice or attention.  
Store locked up.  
Collect spillage.  
Dispose of contents in accordance with local, state, and federal regulations

### **SECTION 3 | COMPOSITION/INFORMATION ON INGREDIENTS**

<b>COMPONENTS</b>	<b>CAS NO.</b>	<b>% BY WEIGHT</b>
Flumioxazin	103361-09-7	51.0
Other ingredients	-	Up to 100

### **SECTION 4 | FIRST AID MEASURES**

**If Swallowed:** Do not give any liquid to the person. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. If symptoms develop, get medical advice.

**If in Eyes:** Hold eye open and rinse slowly and gently with water for several minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation persists.

**If on Skin or Clothing:** Take off contaminated clothing. Wash with soap and water. Get medical attention if irritation or symptoms develop.



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**If Inhaled:** Move person 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 further treatment advice.

**Advice to physician:** There is no specific antidote. Treat symptomatically and supportively as and when required.

## SECTION 5 | FIER FIGHTING MEASURES

**Flash point:** Not flammable.

**Extinguishing Media:** Use foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.

**Hazardous thermal composition products:** May produce gases such as fluorine compounds, and oxides of carbon and nitrogen.

**Fire fighting instructions:** Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Dike and collect water used to fight fire to prevent environmental damage due to run off. Minimize use of water to prevent environmental contamination.

**Fire fighting equipment:** Full firefighting turn-out gear (Bunker gear) including self-contained breathing apparatus with full face piece.

## SECTION 6 | ACCIDENTAL RELEASE MEASURES

**In case of spills:** Clean up spills immediately. Reduce airborne dust and avoid breathing dust. Wear appropriate safety equipment. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Consult Section 8 of this document for additional precautions.

**Small spill:** Vacuum or sweep up material and place in a container for reuse or disposal.

**Large spill:** Avoid creating dust cloud. Vacuum or sweep up material and place in a container for reuse or disposal. Pick up wash liquid with additional absorbent for disposal. After removal, flush contaminated area thoroughly with water.

**Caution:** Minimize use of water to prevent runoff into municipal sewers or other open bodies of water and minimize environmental contamination. Contact your State Pesticide or Environmental Control Agency, or nearest EPA Regional Office for guidance on disposal.

## SECTION 7 | HANDLING AND STORAGE



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**Precautions for Safe Handling:** Use only in a well-ventilated area. Wear proper safety equipment specified in Section 8 when mixing, loading or otherwise handling concentrate. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing if pesticide gets inside clothing. Then wash thoroughly and put on clean clothing. Remove PPE after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Do not reuse container.

**Conditions for Safe Storage:** Keep pesticide in original container. Keep container tightly closed when not in use. Store in a locked storage area. Avoid cross contamination with other pesticides or fertilizers during handling and storage. Store in a cool, dry place. Do not contaminate water, feed, or food by storage and disposal. Do not store diluted spray.

Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

KEEP OUT OF REACH OF CHILDREN!

## SECTION 8 | EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Proper ventilation is required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Keep containers closed when not in use.

### **Personal Protective Measures:**

**Eye protection:** Safety glasses with side-shields.

**Skin and body protection:** Long-sleeved shirt and long pants, shoes plus socks, chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride.

**Respiratory protection:** Normally not required. If handling in an enclosed environment where dusts or mists may exceed acceptable levels, wear NIOSH approved air-purifying respirator approved for pesticides.

**General protective measures:** Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

## SECTION 9 | PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Off-white to slight yellow granular



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<b>Odor:</b>	Slightly faint
<b>Odor threshold:</b>	No data available
<b>pH:</b>	5.0-8.0
<b>Water :</b>	≤3%
<b>Flash point:</b>	No data available
<b>Evaporation rate:</b>	No data available
<b>Flammability:</b>	Not flammable
<b>Upper/lower flammability or explosive limits:</b>	No data available
<b>Pour density:</b>	0.576±0.02 g/mL
<b>Solubility(ies):</b>	Dispersible in water
<b>Autoignition temperature:</b>	No data available
<b>Decomposition temperature:</b>	No data available
<b>Viscosity:</b>	Not applicable

## SECTION 10 | STABILITY AND REACTIVITY

**Chemical stability:** Stable under normal use and storage conditions.

**Possibility of hazardous reactions:** Will not occur.

**Conditions to Avoid:** Avoid heat of open flame and high temperatures. Keep containers sealed.

**Incompatible materials:** Strong oxidizing agents, such as chlorates, nitrates, and peroxides. Strong acids or bases.

**Hazardous Decomposition Products:** Under fire conditions, may produce gases such as fluorine compounds, and oxides of carbon and nitrogen.

## SECTION 11 | TOXICOLOGICAL INFORMATION

**Acute oral toxicity: Rat LD<sub>50</sub>** > 5000 mg/kg body weight

**Acute dermal toxicity: Rat LD<sub>50</sub>** > 2000 mg/kg body weight

**Acute toxicity – Inhalation(LC50 Rat):** > 2000 mg/m<sup>3</sup> air

**Eye irritation:** Slight-irritant (rabbit).



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**Skin irritation:** Non Irritating (Rabbit)

**Sensitization:** Not a Sensitizer (Guinea Pig)

<b>SECTION 12</b>	<b>ECOLOGICAL INFORMATION</b>
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**Acute oral toxicity of birds:** LD50 (7d) of Japanese quails was  $2.0 \times 10^3$  mg a.i./kg b.w., low toxicity.

**Acute oral toxicity of honeybee:** LD50 (48 h) > 100 µg a.i./honeybee, low toxicity.

**Acute contact of honeybees:** The acute exposure toxicity LD50 (48 h) to *Apis mellifera* is > 100 µg a.i./bee, low toxicity.

**Acute toxicity of silkworm:** LC50 (96h) =  $2.00 \times 10^3$  mg a.i./L, low toxicity.

**Acute toxicity of fish:** LC50 (96h) for zebrafish was 0.751 mg a.i./L, high toxicity.

**Acute toxicity of Daphnia:** EC50 (48h) > 2.11 mg a.i./L, low toxicity.

**Acute toxicity of algae:** *Selenastrum carpicornutum* theoretical ErC50 (72h) was 0.00611 mg a.i./L, EyC50 (72h) was 0.00307 mg a.i./L; actual ErC50 (72h) was 0.00158 mg a.i./L, EyC50 (72h) was 0.000580 mg a.i./L, high toxicity.

**Acute toxicity of earthworms:** LC50 (14d) > 100 mg a.i./kg dry soil, low toxicity.

**Acute toxicity of Trichogramma:** LR50 (24h) > 900 g a. i./hm<sup>2</sup>.

**Acute toxicity of ladybird:** LR50 =  $1.27 \times 10^3$  g a. i./hm<sup>2</sup> for *coccinella septempunctata*.

<b>SECTION 13</b>	<b>DISPOSAL CONSIDERATION</b>
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**Waste Disposal Method:**

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide is a violation of Federal law.

**Container Handling and Disposal:**

**Nonrefillable Containers 5 gallons or less:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying.



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Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

**Nonrefillable containers larger than 5 gallons:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. If recycling or reconditioning not available, puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**Refillable containers larger than 5 gallons:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure



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two more times.

## SECTION 14 | TRANSPORT INFORMATION

Follow the precautions indicated in Section 7: HANDLING AND STORAGE of this MSDS.

### DOT

#### < 119 Gallons per finished container

Not regulated for domestic ground transport by US DOT.

#### ≥ 119 Gallons per finished container

UN 3077, Environmentally hazardous substance, Solid, n.o.s., 9, III, Marine Pollutant

### IMO / IMDG

UN 3077, Environmentally hazardous substance, Solid, n.o.s., 9, III, Marine Pollutant

### IATA

UN 3077, Environmentally hazardous substance, Solid, n.o.s., 9, III, Marine Pollutant

## SECTION 15 | REGULATORY INFORMATION

**TSCA Inventory:** This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:

### Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370):

Chronic Health

### Section 313 Toxic Chemical(s):

None

### Reportable Quantity (RQ) under U.S. CERCLA:

None

### RCRA Waste Code:

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

### State Information:

Other state regulations may apply. Check individual state requirements.





# Longwind

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<b>SECTION 16</b>	<b>OTHER INFORMATION</b>
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This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of the how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made the user should contact the company.

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END OF MSDS