



TIDE INTERNATIONAL USA, INC.

-A DIVISION OF TIDE GROUP

REVISION DATE: 04/012/2024 VERSION 1.0

**[1. Identification]**

Product name: TIDE FLUMI 51% WDG

Chemical name: N-[7-fluoro-3,4-dihydro-3-oxo-4-(prop-2-ynyl)-2H-1,4-benzoxazin-6-yl] cyclohex-1-ene-1,2- dicarboximide

EPA Reg. No.: 84229-65

Recommended Use: Herbicide

Supplier: Tide International, USA, INC.  
21 Hubble, Irvine, CA 92618  
1-949-679-3535

For medical or chemical\* emergencies: Call CHEMTREC®: 1-800-424-9300 (24 hours/day)  
\*Spill, leak, fire, exposure or accident

For non-emergency product information: Call the NATIONAL PESTICIDE INFORMATION CENTER  
1-800-858-7378 (Monday through Friday, 8-12 PM Pacific time)

**[2. Hazard(s) Identification]**

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR §1910.1200 (2012)

**Classification of the substance or mixture****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

**GHS label elements:****GHS pictograms****Signal Word: WARNING****GHS Hazard Statements:**

H303+H313 May be harmful if swallowed or in contact with skin  
H332 Harmful if inhaled  
H361 Suspected of damaging fertility or the unborn child  
H400 Very toxic to aquatic life  
H410 Very toxic to aquatic life with long lasting effects

**Precautionary Statements:****Prevention:**

P261 Avoid breathing/mist/vapors/spray.  
P271 Use only outdoors or with adequate ventilation.

P203 Obtain, read and follow all safety instructions before use.  
P280 Wear protective gloves.  
P273 Avoid release to the environment.

**Response:**

P301+P317 IF SWALLOWED: Get medical help.  
P302+P317 IF ON SKIN: Get medical help.  
P304 + P340 + P317 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help.  
P318 IF exposed or concerned, get medical advice.  
P391 Collect spillage.

**Storage:**

P405 Store locked up.

**Disposal:**

P501 Dispose of contents/container to hazardous or special waste collection point, in accordance with local, state, and federal regulations.

**Routes of exposure:** Eyes, skin, ingestion & inhalation.

**Other hazard information:**

No data available.

**[3. Composition / Information on Ingredients]**

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Active ingredient	CAS No.	% BY WEIGHT
Flumioxazin	103361-09-7	51.0
Other ingredients	-	Up to 100

**[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.

**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.

**[5. Fire-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.

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## [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.

## [7. Handling and Storage]

**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!

## [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.

## [9. Physical and Chemical Properties]

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

**Odor:** Slightly faint

**Odor threshold:** No data available.

**pH:** 5.0-8.0

**Water:** ≤ 3%

**Flash point:** No data available

**Evaporation rate:** No data available

**Flammability:** Not flammable

**Upper/lower flammability or explosive limits:** No data available

**Pour density:** 0.576±0.02 g/mL

**Solubility(ies):** Dispersible in water

**Autoignition temperature:** No data available

**Decomposition temperature:** No data available

**Viscosity:** Not applicable

## [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.

## [11. Toxicological Information]

**Acute Toxicity:**

**Acute oral (Rats):** LD<sub>50</sub> > 5000 mg/kg body weight

**Acute dermal (Rats):** LD<sub>50</sub> > 2000 mg/kg body weight

**Acute inhalation (Rats):** LC<sub>50</sub> > 2000 mg/m<sup>3</sup> air

**Eye irritation (Rabbit):** Slight-irritant

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

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

## [12. Ecological Information]

**Ecotoxicity:**

**Acute oral toxicity of birds:** LD<sub>50</sub> (7d) of Japanese quails was 2.0 × 10<sup>3</sup> mg a.i./kg b.w., low toxicity.

**Acute oral toxicity of honeybee:** LD<sub>50</sub> (48 h) > 100 µg a.i./honeybee, low toxicity.

**Acute contact of honeybees:** The acute exposure toxicity LD<sub>50</sub> (48 h) to Apis mellifera is > 100 µg a.i./bee, low toxicity.

**Acute toxicity of silkworm:** LC<sub>50</sub> (96h) = 2.00×10<sup>3</sup> mg a.i./L, low toxicity.

**Acute toxicity of fish:** LC<sub>50</sub> (96h) for zebrafish was 0.751 mg a.i./L, high toxicity.

**Acute toxicity of Daphnia:** EC<sub>50</sub> (48h) > 2.11 mg a.i./L, low toxicity.

**Acute toxicity of algae:** Selenastrum carpicornutum theoretical ErC<sub>50</sub> (72h) was 0.00611 mg a.i./L, EyC<sub>50</sub> (72h) was 0.00307 mg a.i./L; actual ErC<sub>50</sub> (72h) was 0.00158 mg a.i./L, EyC<sub>50</sub> (72h) was 0.000580 mg a.i./L, high toxicity.

**Acute toxicity of earthworms:** LC<sub>50</sub> (14d) > 100 mg a.i./kg dry soil, low toxicity.

**Acute toxicity of Trichogramma:** LR<sub>50</sub> (24h) > 900 g a. i./hm<sup>2</sup>.

**Acute toxicity of ladybird:** LR<sub>50</sub>=1.27×10<sup>3</sup> g a. i./hm<sup>2</sup> for coccinella septempunctata.

## [13. Disposal Considerations]

**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, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Container Handling and Disposal:**

**Nonrefillable plastic drum ≤50 lbs:** Nonrefillable container. Do not reuse or refill this container. Triple 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 ¼ 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 if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

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## [14. Transport Information]

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

### **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., (Flumioxazin), 9, III, Marine Pollutant

### **IMO / IMDG**

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

### **IATA**

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

## [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.

**California Proposition 65:** Not Listed.

## [16. Other Information]

*The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. Tide International, USA, INC. assumes no responsibility for results obtained or for incidental or consequential damages arising from the use of these data.*