



TIDE INTERNATIONAL USA, INC.

-A DIVISION OF TIDE GROUP

REVISION DATE: 04/12/2024 VERSION 1.0

[1. Identification]

Product name: TIDE FLUMI 44% SC

Chemical name: 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

EPA Reg. No.: 84229-64

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	44.0
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 symptoms develop, get medical 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: Dry chemical, carbon dioxide, foam, water spray or fog.

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

Further information: Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Auto-ignition temperature: No data available

Lower explosion limit: No data available

Upper explosion limit: No data available

[6. Accidental Release Measures]

Personal precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal. Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

Methods for cleanup and disposal: Pump free liquid into an appropriate container. Absorb residual with inert absorbent material. Wash entire spill area with a detergent slurry, absorb and sweep into container for disposal. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

Other information: Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

[7. Handling and Storage]

Precautions for safe handling: Use only in area provided with appropriate exhaust ventilation. Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands immediately after work, if necessary, take a shower. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).

Conditions for safe storage: Keep pesticide in original container. Store in a cool, dry, secure place. Do not put formulation or dilute spray solution into food or drink containers. Do not contaminate food or foodstuffs. Do not store or transport near feed or food. Not for use or storage in or around the home. For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC (800) 424-9300.

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

[8. Exposure Controls / Personal Protection]

Engineering controls: Follow manufacturer's instructions for cleaning/maintaining PPE. Use in ventilated areas adequate to keep exposure below the TWA. Keep containers closed when not in use.

Personal protective measures:

Eye protection: Safety glasses with side-shields.

Skin and body protection: Wear long-sleeved shirt and long pants and shoes plus socks.

Respiratory protection: A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits. When respirators are required, select a certificated equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

General protective measures: Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.

[9. Physical and Chemical Properties]

Appearance: Off white opaque viscous liquid

Odor: Faint characteristic odor

Odor threshold: No data available.

pH: 5.0-7.0

Evaporation rate: No data available

Flammability: No data available

Vapor pressure: No data available

Vapor density: No data available

Relative density: 1.138±0.02 g/mL @ 20°C

Solubility(ies): No data available

Partition coefficient: n-octanol/water: No data available

Autoignition temperature: No data available

Decomposition temperature: No data available

Viscosity: 701.8 centistokes @ 20°C; 435.9 centistokes @ 40°C

Note: Physical data are typical values based on material test but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis or as a specification.

[10. Stability and Reactivity]

Chemical stability: Stable under normal use and storage conditions.

Possibility of hazardous reactions: Will not occur.

Conditions to avoid: Excessive heat. Do not store near heat or flame.

Incompatible materials: Strong oxidizing agents, such as chlorates, nitrates, and peroxides.

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): LD₅₀ > 2000 mg/kg body weight

Acute dermal (Rats): LD₅₀ > 2000 mg/kg body weight

Acute inhalation (Rats): LC₅₀ > 2.87 mg/L air - 4 hours

Eye irritation (Rabbit): Non-irritant.

Skin irritation (Rabbit): Non-irritant

Sensitization (Guinea Pig): Not a Sensitizer

[12. Ecological Information]

Ecotoxicity:

Birds: Acute oral LD₅₀ for Japanese Quail >2000 mg/kg body weight.

Fish: Acute LC₅₀ (96h): for Danio rerio (Zebra) >195.3 mg/l.

Algae: ErC₅₀ (72h) for *Desmodesmus subspicatus* 0.125 mg a.i./l.

EyC₅₀ (72h) for *Desmodesmus subspicatus* 0.048 mg a.i./l.

Daphnia: EC₅₀(48h) >100 mg/L.

Bees: LD₅₀ (oral) for *Apis mellifera* >100 µg a.i./bee;

LD₅₀(contact) for *Apis mellifera* >100µg a.i./bee.

Worms: Acute LC₅₀ for *Eisenia foetida* >1000 mg/kg.

Environmental Fate:

Flumioxazin degrades rapidly in water and soil. Dissipation occurs by a combination of hydrolysis and microbial oxidation. Although flumioxazin dissipates rapidly, discrete intermediates do not accumulate and the ultimate environmental products are incorporated into soil organic matter and carbon dioxide. Based on column leaching studies and the short aerobic soil half-life, the potential for flumioxazin or its degradation products to leach in field agricultural soils is low. The low use rate and rapid soil dissipation results in low carryover potential to rotational crops.

[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 Containers ≤ 5 gal: 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 and drain for 10 seconds after the flow begins to drip. 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.

Nonrefillable Plastic Containers > 5 gal: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty remaining contents into application equipment or a mix tank. Fill the container ¼ 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. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

[14. Transport Information]

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

DOT

< 119 Gallons per finished container

Non Regulated

≥ 119 Gallons per finished container

UN 3082, Environmentally hazardous substance, liquid, n.o.s., (Flumioxazin), 9, III, Marine Pollutant

IMO / IMDG

UN 3082, Environmentally hazardous substance, liquid, n.o.s., (Flumioxazin), 9, III, Marine Pollutant

IATA

UN 3082, Environmentally hazardous substance, liquid, 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.