



Dear Resident of Creekside Estates:

This letter is to inform residents living on the back pond that Creekside Estates Neighborhood Association (CENA) was informed about the water lettuce (Pistia) issue in the pond. Water Lettuce is an invasive plant species that will overtake the pond, create potential drainage issues, as well as serve as a mosquito breeding habitat. CENA has been researching options to eradicate the water lettuce in the pond. We have decided that the best and most cost effective method to eradicate the water lettuce is to have a professional vegetation management company come out and treat the pond.

After researching options, we decided to contract with Southeast Vegetation Management (SVM) to have the water treated with EPA approved aquatic herbicides to clear the pond of the water lettuce. In order to rid the pond of the water lettuce and not cause a fish kill, it will require two treatments. The first treatment, depending on weather will be the week of April 16th. The second treatment will occur approximately 2 weeks after the first to give the vegetation time to decompose and sink to the bottom. We were informed that the plants should decompose and sink quickly, without causing any foul smells. In order to treat the pond SVM will need to launch a small boat with a pro drive gas powered motor to be able to navigate through the vegetation. It should not be loud or disturb any residents. SVM will launch the boat on the Creek Valley end of the pond by the old Sewage Treatment Plant.

We have spoken in person to several residents living on the pond about the plans to treat the pond and have received full support, and you may already be aware, but we wanted to take this opportunity to send a letter to inform you. We also want to take this opportunity to allow you to voice any questions or concerns you may have with the pond being treated. Feel free to call or text Anthony Shamis at (225) 485-4488 with any questions or concerns you may have. Also, please contact us, if you would like to donate to the cause. We have already received donations from some residents on the pond. We would like to sincerely thank them. In addition, if you provide us with your phone number, we would be happy to provide you with any updates we get regarding any changes to the schedule, etc.

If you would like to become a member of the association, or just learn more about us, please go to the following link, where you can also email us by clicking on the contact us button on the main tab: <https://creekside-estates.org>.

Attached to this letter you will find three attachments:

- Southeast Vegetation Management Quote
- Clipper Herbicide – Safety Data Sheet
- Tribune Herbicide – Safety Data Sheet

Sincerely,

Creekside Estates Neighborhood Association, Board of Directors:


Anthony Shamis – President

Greg Crowell – Vice President

Christina Babb – Secretary

Krista Adams – Treasurer

Tammy Stalsby - Director



Southeast Vegetation Management
P.O. Box 43, Brierfield, AL 34035
Tel 225-931-9397
danielh@southeastvm.com
www.southeastvm.com



MARCH 31, 2023

OBJECTIVE

An effective kill of undesirable vegetation from the Creek Valley Retention Pond.

SCOPE OF SERVICES

Foliar application of EPA approved aquatic herbicides on water lettuce (*Pistia stratiotes*) to clear pond for neighborhood recreational activities.

BENEFITS

Benefits include a clean and safe waterbody free of nuisance aquatic plants, which could lead to complete return to all neighborhood recreational activities. This also helps to eliminate the potential for a clogged drain pipe and possible flooding. We use proven aquatic approved EPA herbicides from the beginning to achieve maximum results and for the protection of all beneficial aquatic life both in and out of the waterbody.

We appreciate this opportunity and look forward to doing business with you and to taking over responsibility for your vegetation control for many years to come.

Sincerely,

Daniel Hill

Southeast Vegetation Management
P.O. Box 43, Brierfield, AL 35035
Tel 225-931-9397
danielh@southeastvm.com
www.southeastvm.com



March 31, 2023

Description	Qty	Rate	Total
2023 Vegetation Control Services			

<u>Scope:</u> Spraying Water Hyacinth	2 A	350.00	\$700.00
<u>Schedule of Work:</u> Initial application Initial: April 2 nd application Two weeks post initial treatment Customer can add any additional areas outside the scope of work for an additional charge of \$250.00 per hour application time			

TOTAL: \$700.00

***** Herbicide Rates and Application are tailored to each site and may require additional applications, depending on site conditions, weather, and herbicide selection. These circumstances are specific to the customer and the services purchased.*****

Customer Signature



1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Clipper® SC Aquatic Herbicide

EPA Reg. No.: 71368-114

Product Type: Herbicide

Company Name: Nufarm Americas Inc
11901 S. Austin Avenue
Alsip, IL 60803
1-855-280-6609

Telephone Numbers: For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night: 1-800-424-9300
For Medical Emergencies Only, Call 1-877-325-1840

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not exactly the same as on the FIFRA label. Certain sections are superseded by federal law governed by EPA for a registered pesticide. Please see Section 15. REGULATORY INFORMATION for explanation.

2. HAZARDS IDENTIFICATION

PHYSICAL HAZARDS:

Not Hazardous

HEALTH HAZARDS:

Not Hazardous

ENVIRONMENTAL HAZARDS:

Hazardous to aquatic environment, acute Category 1

Hazardous to aquatic environment, chronic Category 1

SIGNAL WORD

No Signal Word

HAZARD STATEMENTS

Very toxic to aquatic life with long-lasting effects.



PRECAUTIONARY STATEMENTS

Avoid unintended release to the environment.

Collect spillage.

Dispose of contents and container in accordance with local, state and federal regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENTS	CAS NO.	% BY WEIGHT
Flumioxazin	103361-09-7	41 – 43.5
Propylene Glycol	57-55-6	5.7 – 6.3
Other Ingredients	Trade Secret	Trade Secret

Synonyms: 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

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

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.

Most Important symptoms/effects, acute and delayed: Skin exposure may cause slight irritation. May cause mild eye irritation.

Indication of Immediate medical attention and special treatment if needed: None expected.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Use extinguishing media suitable for surrounding materials. Dry chemical, carbon dioxide, foam, water spray or fog.

Special Fire Fighting Procedures: Firefighters should wear NIOSH approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later.

Hazardous Decomposition Materials (Under Fire Conditions): May produce gases such as fluorine compounds, and oxides of carbon and nitrogen.

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**HANDLING:**

Avoid contact with skin, eyes or clothing. Do not breathe spray mist or vapors. Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing/Personal Protective Equipment (PPE) immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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:**

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

SAFETY DATA SHEET

Clipper® SC Aquatic Herbicide

Personal Protective Equipment:

Eye/Face Protection: To avoid contact with eyes, wear goggles or safety glasses.

Skin Protection: To avoid contact with skin wear long-sleeved shirt and long pants, shoes plus socks, and chemical-resistant gloves made of any waterproof material. Washing facilities should be readily accessible to the work area.

Respiratory Protection: Not normally required. If vapors or mists or dusts exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Exposure Guidelines:

Component	OSHA		ACGIH		Unit
	TWA	STEL	TWA	STEL	
Flumioxazin	NE	NE	NE	NE	
Propylene Glycol	10 (WEEL)	NE	NE	NE	mg/m3

NE = Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Off white/milky liquid
Odor:	Moderately sour
Odor threshold:	No data available
pH:	6.38 (1% w/w dispersion in DIW @ 25° C)
Melting point/freezing point:	No data available
Initial boiling point and boiling range	No data available
Flash point:	Aqueous composition; >212° F (>100° C)
Evaporation rate:	No data available
Flammability:	No data available
Upper/lower flammability or explosive limits:	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Relative density:	1.157 g/mL @ 24° 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:	487.2 cPs @ 24° C; 266.8 cPs @ 42 ° C (50 RPM, Brookfield)

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Reactivity: Not reactive

Chemical Stability: This material is stable under normal handling and storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization 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

Likely Routes of Exposure: Inhalation, Skin contact, Eye contact

Eye Contact: May cause mild irritation. Non-irritating to the eye based on toxicity studies.

Skin Contact: May cause mild irritation on prolonged or repeated exposure. Non-irritating to slight/mild irritation to the skin based on toxicity studies.

Ingestion: May be harmful if swallowed in large amounts. Low toxicity if ingested.

Inhalation: May cause minor irritation to the respiratory tract. Low toxicity if inhale

Symptoms of Exposure: None expected.

SAFETY DATA SHEET

Clipper® SC Aquatic Herbicide

Delayed, immediate and chronic effects of exposure: Adverse effects observed in animals exposed to high doses of flumioxazin technical for long periods of time included effects on blood, liver and kidney.

Toxicological Data:

Data from laboratory studies conducted are summarized below:

Oral: Rat LD₅₀: > 5,000 mg/kg (female)

Dermal: Rat LD₅₀: >5,000 mg/kg

Inhalation: Rat 4-hr LC₅₀: >2.10 mg/L (No mortality at highest dose tested)

Eye Irritation: Rabbit: Non-irritating

Skin Irritation: Rabbit: Slightly irritating (PDII=0.1)

Skin Sensitization: Not a contact sensitizer in the Local Lymph Node Assay (LLNA) in Mice.

Subchronic (Target Organ) Effects: Compound related effects of Flumioxazin Technical noted in rats following subchronic exposures at high dose levels were hematotoxicity including anemia, and increases in liver, spleen, heart, kidney and thyroid weights. In dogs, the effects produced at high dose levels included a slight prolongation in activated partial thromboplastin time, increased cholesterol and phospholipid, elevated alkaline phosphatase, increased liver weights and histological changes in the liver. The lowest no-observable-effect-level (NOEL) in subchronic studies was 30 ppm in the three-month toxicity study in rats.

Carcinogenicity / Chronic Health Effects: Repeated exposures to Flumioxazin Technical in animals have produced anemia and other blood formation changes, organ weight changes and changes in blood chemistry. Flumioxazin Technical did not produce cancer in life-time feeding studies in laboratory animals.

Reproductive Toxicity: Reproductive effects were observed in rats exposed to high levels of Flumioxazin Technical.

Developmental Toxicity: Birth defects were produced in the offspring of female rats exposed to Flumioxazin Technical. No effects were observed in rabbits.

Genotoxicity: Flumioxazin technical does not present a genetic hazard.

Assessment Carcinogenicity: None listed with ACGIH, IARC, NTP or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicity: Flumioxazin technical is practically non-toxic to bees and avian species. It is slightly to moderately toxic to freshwater fish and moderately to highly toxic to aquatic invertebrates.

From studies conducted on Flumioxazin active ingredient:

96-hour LC ₅₀ Rainbow Trout:	2.3 mg/L	Bobwhite Quail Oral LD ₅₀ :	>2,250 mg/kg
96-hour LC ₅₀ Bluegill Sunfish	> 21 mg/L	Bobwhite Quail 8-day Dietary LC ₅₀ :	>5,620 ppm
48-hour EC ₅₀ Daphnia Magna :	> 5.5 mg/L	Mallard Duck Oral LD ₅₀ :	>2,250 mg/kg
96-hour LC ₅₀ Sheepshead Minnow:	>4.7 mg/L	Mallard Duck 8-day Dietary LC ₅₀ :	>5,620 ppm
96-hour LC ₅₀ Mysid Shrimp:	0.23 mg/L		
Acute Contact LC ₅₀ Honeybee:	105 µg/bee		

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 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.

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.

SAFETY DATA SHEET

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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 two more times.

14. TRANSPORTATION INFORMATION

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

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

EPA FIFRA INFORMATION

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

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

U.S. FEDERAL REGULATIONS

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:

SAFETY DATA SHEET

Clipper® SC Aquatic Herbicide

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

National Fire Protection Association (NFPA) Hazard Rating:

Rating for this product: Health: 1 Flammability: 1 Reactivity: 0

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides 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, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Nufarm Americas Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Nufarm Americas Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS AND ALL SUCH WARRANTIES ARE HEREBY SPECIFICALLY DISCLAIMED.

Date of Issue: October 11, 2018

Supersedes: May 29, 2018

TRIBUNE HERBICIDE

Date: 1/2/2015
Replaces: 3/1/2011

1. PRODUCT IDENTIFICATION

Product identifier on label: **TRIBUNE HERBICIDE**
Product No.: A12872A
Use: Herbicide
Manufacturer: Syngenta Crop Protection, LLC
Post Office Box 18300
Greensboro NC 27419
Manufacturer Phone: 1-800-334-9481

Emergency Phone: 1-800-888-8372

2. HAZARDS IDENTIFICATION

Classifications: Corrosive to Metals: Category 1
Oral: Category 4
Inhalation: Category 3
Specific Target Organ Toxicity: Repeated Category 2
Eye Damage/Irritation: Category 2B

Signal Word (OSHA): Danger

Hazard Statements: May be corrosive to metals
Harmful if swallowed
Causes eye irritation
Toxic if inhaled
May cause damage to organs through prolonged or repeated exposure

Hazard Symbols:



Precautionary Statements: Keep only in original container.
Do not breathe mist, vapors, spray.
Avoid breathing mist, vapors, spray.
Wash hands and face thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
If swallowed: Call a poison center, doctor or Syngenta if you feel unwell. Rinse mouth.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

TRIBUNE HERBICIDE

Date: 1/2/2015
Replaces: 3/1/2011

If eye irritation persists: Get medical advice.
Call a poison center, doctor or Syngenta.
Get medical advice if you feel unwell.
See Section 4 First Aid Measures.
Absorb spillage to prevent material damage.
Store locked up.
Store in corrosive resistant plastic, plastic-lined steel, stainless steel or fiberglass container.
Dispose of contents and container in accordance with local regulations.

Other Hazard Statements: Flammable hydrogen gas may be formed on contact with incompatible metals. See "Conditions to Avoid", Section 10.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Common Name	CAS Number	Concentration
		Trade Secret	
Other ingredients	Other ingredients	Trade Secret	62.7%
[6,7-dihydrodipyrido(1,2-a:2',1'-c)pyrazinediium dibromide]	Diquat Dibromide	85-00-7	37.3%

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

4. FIRST AID MEASURES

Have the product container, label or Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison control center or doctor, or going for treatment.

Ingestion: If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Eye Contact: If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Skin Contact: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Inhalation: 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 Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

Most important symptoms/effects:

Eye irritation

Indication of immediate medical attention and special treatment needed:

To be effective, treatment for ingestion of the product must begin IMMEDIATELY. Treatment consists of binding the active ingredient, diquat, in the gut with suspensions of activated charcoal or bentonite clay, administration of cathartics to enhance elimination and removal of diquat from the blood by charcoal hemoperfusion or continuous hemodialysis.

TRIBUNE HERBICIDE

Date: 1/2/2015
Replaces: 3/1/2011

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use dry chemical, foam or CO2 extinguishing media. If water is used to fight fire, dike and collect runoff.

Specific Hazards:

This product may form flammable and explosive hydrogen gas when in contact with aluminum.

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

Special protective equipment and precautions for firefighters:

Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:

Follow exposure controls/personal protection outlined in Section 8.

Methods and materials for containment and cleaning up:

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE

Precautions for safe handling:

This product reacts with aluminum to produce flammable hydrogen gas. Do not mix or store in containers or systems made of aluminum or having aluminum fittings.

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Conditions for safe storage, including any incompatibilities:

Store locked up.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Occupational Exposure Limits:

Chemical Name	OSHA PEL	ACGIH TLV	Other	Source
Other ingredients	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Diquat Dibromide	Not Established	0.5 mg/m ³ TWA	0.5 mg/m ³ TWA (0.5 total; 0.08 respirable)	Manufacturer

TRIBUNE HERBICIDE

Date: 1/2/2015
Replaces: 3/1/2011

Appropriate engineering controls:

Use effective engineering controls to comply with occupational exposure limits (if applicable).

Individual protection measures:

Ingestion:

Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact:

Where eye contact is likely, use chemical splash goggles.

Skin Contact:

Where contact is likely, wear chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyvinyl chloride [PVC] or Viton), coveralls, socks and chemical-resistant footwear.

Inhalation:

A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits.

In case of emergency spills, use a NIOSH approved respirator with any N, R, P or HE filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Dark brown liquid

Odor: Odorless

Odor Threshold: Not Available

pH: 4 - 6

Melting point/freezing point: Not Applicable

Initial boiling point and boiling range: Not Available

Flash Point (Test Method): Not Applicable

Flammable Limits (% in Air): Not Available

Flammability: Not Applicable

Vapor Pressure: Diquat Dibromide < 10(-8) mmHg @ 77°F (25°C)

Vapor Density: Not Available

Relative Density: 1.202 g/ml @ 68°F (20°C)

Solubility (ies): Diquat Dibromide 718,000 mg/l @ 68°F (20°C) and pH 7.2

Partition coefficient: n-octanol/water: Not Available

Autoignition Temperature: Not Applicable

Decomposition Temperature: Not Available

Viscosity: Not Available

Other: None

TRIBUNE HERBICIDE

Date: 1/2/2015
Replaces: 3/1/2011

10. STABILITY AND REACTIVITY

Reactivity: Not reactive.

Chemical stability: Stable under normal use and storage conditions.

Possibility of hazardous reactions: Will not occur.

Conditions to Avoid: Concentrate should not be stored in aluminum containers. Spray solutions should not be mixed, stored or applied in containers other than plastic, plastic-lined steel, stainless steel or fiberglass.

Incompatible materials: None known.

Hazardous Decomposition Products: Flammable hydrogen gas may be formed on contact with aluminum. See "Conditions to Avoid", Section 10.

11. TOXICOLOGICAL INFORMATION

Health effects information

Likely routes of exposure: Dermal, Inhalation

Symptoms of exposure: Eye irritation

Delayed, immediate and chronic effects of exposure: Eye irritation

Numerical measures of toxicity (acute toxicity/irritation studies (finished product))

Ingestion:	Oral (LD50 Female Rat) :	886 mg/kg body weight
Dermal:	Dermal (LD50 Rabbit) :	> 5050 mg/kg body weight
Inhalation:	Inhalation (LC50 Rat) :	0.62 mg/l air - 4 hours
Eye Contact:	Mildly Irritating (Rabbit)	
Skin Contact:	Slightly Irritating (Rabbit)	
Skin Sensitization:	Not a Sensitizer (Guinea Pig)	

Reproductive/Developmental Effects

Diquat Dibromide: Mutagenicity: No evidence in in vivo assays.

Development Toxicity: In rabbit studies a small percentage of fetuses had minor defects at 3 and 10 mg ion/kg/d.

Chronic/Subchronic Toxicity Studies

Diquat Dibromide: Kidney weight decreases and cataracts seen in dogs at 12.5 mg ion/kg/d.

No evidence for neurotoxic effects in rats dosed up to 400 ppm ion in the diet for 13 weeks.

Carcinogenicity

Diquat Dibromide: No evidence of carcinogenicity in rat and mouse studies.

Chemical Name	NTP/IARC/OSHA Carcinogen
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Other ingredients	No
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[6,7-dihydrodipyrido(1,2-a:2',1'-c)pyrazinediium dibromide]	No
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Date: 1/2/2015
Replaces: 3/1/2011

Other Toxicity Information

None

Toxicity of Other Components

Not Applicable

Other ingredients

Not Applicable

Target Organs

Active Ingredients

Diquat Dibromide: Eye, kidney

Inert Ingredients

: Not Applicable

Other ingredients: Not Applicable

12. ECOLOGICAL INFORMATION

Eco-Acute Toxicity

Diquat Dibromide:

Fish (Rainbow Trout) 96-hour LC50 14.83 ppm

Invertebrate (Water Flea) Daphnia Magna 48-hour EC50 0.77 ppm

Green Algae 4-day EC50 9.4 ppb

Bird (Mallard Duck) 14-day LD50 60.6 mg/kg

Environmental Fate

Diquat Dibromide:

The information presented here is for the active ingredient, diquat dibromide.
Stable in soil and water. Immobile in soil. Sinks in water (after 24 h).

13. DISPOSAL CONSIDERATIONS

Disposal:

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable

Listed Waste: Not Applicable

14. TRANSPORT INFORMATION

DOT Classification

Ground Transport - NAFTA

Proper Shipping Name: Corrosive Liquid, N.O.S. (Diquat Dibromide)

Hazard Class: Class 8

Identification Number: UN 1760

Packing Group: PG III

Comments

Water Transport - International

TRIBUNE HERBICIDE

Date: 1/2/2015
Replaces: 3/1/2011

Proper Shipping Name: Corrosive Liquid, N.O.S. (Diquat Dibromide), Marine Pollutant
Hazard Class: Class 8
Identification Number: UN 1760
Packing Group: PG III

Air Transport
Proper Shipping Name: Corrosive Liquid, N.O.S. (Diquat Dibromide)
Hazard Class: Class 8
Identification Number: UN 1760
Packing Group: PG III

15. REGULATORY INFORMATION

Pesticide Registration:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

Caution: Harmful if inhaled. Harmful if swallowed. Causes moderate eye irritation. Avoid breathing spray mist. Avoid contact with eyes, skin, or clothing.

EPA Registration Number(s):
100-1390

EPCRA SARA Title III Classification:

Section 311/312 Hazard Classes: Acute Health Hazard

Section 313 Toxic Chemicals: None

CERCLA/SARA 304 Reportable Quantity (RQ):

Report product spills \geq 268 gal. (based on diquat [RQ = 1,000 lbs.] content in the formulation)

RCRA Hazardous Waste Classification (40 CFR 261):

Not Applicable

TSCA Status:

Exempt from TSCA, subject to FIFRA

16. OTHER INFORMATION

NFPA Hazard Ratings

Health: 2
Flammability: 1
Instability: 0

HMIS Hazard Ratings

Health: 2
Flammability: 1
Reactivity: 0

Syngenta Hazard Category: C,S

0	Minimal
1	Slight
2	Moderate
3	Serious
4	Extreme
*	Chronic

For non-emergency questions about this product call:

1-800-334-9481

TRIBUNE HERBICIDE

Date: 1/2/2015
Replaces: 3/1/2011

Original Issued Date: 12/10/2010

Revision Date: 1/2/2015

Replaces: 3/1/2011

Section(s) Revised: 1-16

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.