

#### U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

42750-349

EPA Reg. Number:

Date of Issuance:

8/1/19

## NOTICE OF PESTICIDE:

X Registration
Reregistration
(under FIFRA, as amended)

Term of Issuance:
Unconditional

Name of Pesticide Product:

FLURIDONE 6.3%

Name and Address of Registrant (include ZIP Code):

Morris Gaskin Albaugh, LLC P.O. Box 2127 Valdosta, GA 31604

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

- 1. Submit and/or cite all data required for registration/registration/registration review of your product when the Agency requires all registrants of similar products to submit such data.
- 2. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. A one-year study is required to satisfy these data requirements. You have 18 months from the date of registration to provide these data.

Continued on page 2

Signature of Approving Official:	Date:
Mindy Ondish, Product Manager 23 Herbicide Branch, Registration Division (7505P)	8/1/19

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- 3. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, "EPA Reg. No. 42750-349."
- 4. Submit one copy of the revised final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

Basic CSF dated 11/30/2018

If you have any questions, please contact Grant Rowland by phone at 703-347-0254, or via email at rowland.grant@epa.gov

Enclosure

### SUB-LABEL A:

- SUB-LABEL A Commercial applicator use
- SUB-LABEL B Consumer use

FLURIDONE GROUP 12 HERBICIDE

# **FLURIDONE 6.3%**

## AQUATIC HERBICIDE

AN HERBICIDE FOR MANAGEMENT OF FRESHWATER AQUATIC VEGETATION IN PONDS, LAKES, RESERVOIRS, POTABLE WATER SOURCES, DRAINAGE CANALS AND IRRIGATION CANALS.

**ACTIVE INGREDIENT** 

Contains 0.5 pounds active ingredient per gallon.

### **KEEP OUT OF REACH OF CHILDREN**

# **DANGER/PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se Ia explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

	FIRST AID	
IF IN EYES:	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.	
IF	Call a poison control center or doctor immediately for treatment advice.	
SWALLOWED:	Have person sip a glass of water if able to swallow.	
	• 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 ON SKIN	Take off contaminated clothing.	
OR	Rinse skin immediately with plenty of water for 15-20 minutes.	
<b>CLOTHING:</b>	Call a poison control center or doctor for treatment advice.	
Have the product container or label with you when calling a poison control center or doctor or going for		
treatment. EMERGENCY NUMBERS: 1-800-424-9300 – CHEMTREC – Transportation or Spill		
NOTE TO PHYSIC	CIAN: Probable mucosal damage may contraindicate the use of gastric lavage.	

Refer to the inside of the label booklet for additional precautionary information and Directions for Use.

EPA Reg. No. 42750-GUO

EPA Est. No. xxxxxx-xx-xxx

NET CONTENTS: \_\_\_\_ Gallons

**MANUFACTURED BY:** 

Albaugh, LLC Ankeny, IA 50021 ACCEPTED

08/01/2019

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 42750-349

### **PRECAUTIONARY STATEMENTS**

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

### **DANGER**

Corrosive. Causes irreversible eye damage. Harmful if swallowed. Avoid contact with skin. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses), long-sleeved shirt and long pants, socks, shoes, and chemical resistant (nitrile or butyl;  $\geq$  14 mils) gloves. Wash thoroughly with soap and water after handling and before eating, drinking, and chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

### **ENVIRONMENTAL HAZARDS**

Do not apply to water except as specified on the label. Do not apply directly to tidal saltwater sites. Do not contaminate water by disposal of equipment washwaters. Lowest rates should be used in shallow areas where the water depth is considerably less than the average depth of the entire treatment site, for example, shallow shoreline areas. Trees and shrubs growing in water treated with this product may occasionally develop chlorosis. Follow use directions carefully so as to minimize adverse effects on non-target organisms.

### **DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

**DO NOT** apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Ensure spray drift to non-target susceptible species does not occur.

**DO NOT** apply FLURIDONE 6.3% Aquatic Herbicide in any manner not specifically described in this label.

Observe all cautions and limitations on this label and on the labels of products used in combination with FLURIDONE 6.3%. DO NOT use FLURIDONE 6.3% other than in accordance with the instructions set forth on this label. Keep containers closed to avoid spills and contamination.

Steps to be taken in case material is released or spilled: Dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal.

Keep the spill out of all sewers and open bodies of water.

### PHYSICAL AND CHEMICAL HAZARDS

Do not mix or allow coming in contact with oxidizing agents & fire retardants. Hazardous chemical reaction may occur.

### **RESISTANCE MANAGEMENT**

For resistance management, FLURIDONE 6.3% is a Group 12 herbicide. Any weed population may contain or develop plants naturally resistant to FLURIDONE 6.3% and other Group 12 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same aquatic site. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of FLURIDONE 6.3% or other Group 12 herbicides within a season sequence or among seasons with different herbicide groups that control the same weeds in listed aguatic sites.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; and (3) surviving weeds mixed with controlled weeds of the same species.
- If a weed pest population continues to progress after treatment with FLURIDONE 6.3%, discontinue use of this product and switch to another management strategy or herbicide with a different mode of action ("MOA"), if available.
- Contact your local extension specialist for additional herbicide resistance-management and/or integrated weed management recommendations for specific resistant weed biotypes.
- Report any incidence of non-performance of this product against a particular weed species to your Albaugh, LLC representative. If resistance is suspected, treat weed escapes with an herbicide having a different MOA and/or use non-chemical means to remove escapes, as practical, with the goal of preventing seed production.
- For further information or to report suspected resistance, contact your Albaugh, LLC representative or call Albaugh Customer Service at 1-800-247-8013.

### PRODUCT INFORMATION

FLURIDONE 6.3% is a selective systemic aquatic herbicide for management of freshwater aquatic vegetation in ponds, lakes, reservoirs, drainage canals and irrigation canals including dry or de-watered areas of these sites. FLURIDONE 6.3% is absorbed from water by plant shoots and from hydrosoil by the roots of aquatic vascular plants. For in-water treatments, it is important to maintain the specified concentration of FLURIDONE 6.3% in contact with the target plants for a minimum of 45 days. Rapid water movement or any condition which results in rapid dilation of FLURIDONE 6.3% in treated water will reduce its effectiveness. In susceptible plants, FLURIDONE 6.3% inhibits the formation of carotene. In the absence of carotene, chlorophyll is rapidly degraded by sunlight.

Herbicidal symptoms of FLURIDONE 6.3% appear in seven to ten days and appear as white (chlorotic) or pink growing points in many susceptible plant species. Under optimum conditions, a minimum of 30 to 90 days may be required before the desired level of aquatic plant management is achieved. Plant species susceptibility to FLURIDONE 6.3% may vary depending on time of year, stage of growth, and water movement. For best results, apply FLURIDONE 6.3% prior to initiation of weed growth or when weeds begin active growth. Application to mature target plants may require an application rate at the higher end of the specified rate range and may take longer to control.

FLURIDONE 6.3% is not corrosive to application equipment.

This label provides recommendations on the use of a laboratory analysis for the active ingredient. Albaugh, LLC recommends the use of high-performance liquid chromatography (HPLC) for the determination of fluridone concentrations in water. It is recommended to contact Albaugh, LLC for the incorporation of this test, known as a Fastest, in a treatment program. FasTEST is referenced in this label

as the preferred method for the rapid determination of the active ingredient in water. Other proven chemical analyses for the active ingredient may also be used.

Application rates and calculations of FLURIDONE 6.3% are provided to achieve a desired concentration of fluridone in parts per billion (ppb). The maximum application rate or sum of all application rates is 90 ppb in ponds and 150 ppb in lakes, reservoirs and static canals per annual growth cycle. For purposes of FLURIDONE 6.3% labeling, a pond is defined as a body of water 10 acres or less in size. A lake or reservoir is greater than 10 acres. This maximum concentration is the amount of product calculated as the target application rate, NOT determined by testing the concentration of fluridone in the treated water.

### **USE PRECAUTIONS**

**Obtain Required Permits:** Consult with appropriate state or local pesticide and/or water authorities before applying this product in or around public waters. Permits and posting or treatment notification may be required by state or local public agencies.

### **USE RESTRICTIONS**

**Chemigation:** Do not apply FLURIDONE 6.3% through any type of irrigation system.

**Hydroponic Farming:** Do not use FLURIDONE 6.3% treated water for hydroponic farming unless a FasTEST has been run and confirmed that concentrations are less than 1 ppb.

**Greenhouse and Nursery Plants:** Consult with Albaugh, LLC for site-specific recommendations prior to any use of FLURIDONE 6.3% treated water for irrigating greenhouse or nursery plants. Without site-specific guidance from Albaugh, do not use FLURIDONE 6.3% treated water for irrigating greenhouse or nursery plants.

Water Use Restrictions Following Applications with FLURIDONE 6.3% (Days)

Application Rate	Drinking*	Fishing	Swimming	Livestock/Pet	Irrigation**
Maximum					See irrigation
Rate (150	0	0	0	0	instructions
ppb) or less					below

<sup>\*</sup>Note below, under Potable Water Intakes, the information for application of FLURIDONE 6.3% within ¼ mile (1,320 feet) of a functioning potable water intake.

**Potable Water Intakes:** In lakes and reservoirs or other sources of potable water, do not apply FLURIDONE 6.3% at application rates greater than 20 ppb within one-fourth mile (1,320 feet) of any functioning potable water intake. At application rates of 4 to 20 ppb, FLURIDONE 6.3% may be applied where functioning potable water intakes are present.

NOTE: Existing potable water intakes which are no longer in use, such as those replaced by potable water wells or connections to a municipal water system, are not considered to be functioning potable water intakes.

**Irrigation:** Irrigation from a FLURIDONE 6.3% treated area may result in injury to the irrigated vegetation. Follow these precautions and inform those who irrigate from areas treated with FLURIDONE 6.3% of the irrigation time frames or FasTEST requirements presented in the table below. Follow the following time frames and assay directions to reduce the potential for injury to vegetation irrigated with

<sup>\*\*</sup>Note below, under Irrigation, specific time frames or fluridone concentrations that provide the widest safety margin for irrigating with treated water.

water treated with FLURIDONE 6.3%. Greater potential for crop injury occurs where FLURIDONE 6.3% treated water is applied to crops grown on low organic and sandy soils.

## DAYS AFTER APPLICATION

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Application Site	Established Tree Crops	Established Row Crops/Turf/Plants	Crops/Seedbeds or Areas to be Planted Including Overseeded Golf Course,Greens
Pond and Static Canals*	7	30	Assay required
Canals	7	14	Assay required
Lakes and Resorvoirs**	7	14	Assay required
Dry or De-watered Canals***	0	0	***

<sup>\*</sup>For purposes of FLURIDONE 6.3% labeling, a pond is defined as a body of water 10 acres or less in size. A lake or reservoir is greater than 10 acres.

Where the use of FLURIDONE 6.3% treated water is desired for irrigating crops prior to the time frames established above, the use of FasTEST analysis is recommended to measure the concentration of fluridone in the treated water. Where a FasTEST has determined the fluridone concentrations are less than 10 parts per billion, there are no irrigation precautions for irrigating established tree crops, plants, row crops or turf. For tobacco, tomatoes, peppers or other plants within the Solanaceae Family and newly seeded crops or newly seeded grasses such as overseeded golf course greens, do not use FLURIDONE 6.3% treated water if measured fluridone concentrations are greater than 5ppb. Furthermore, when rotating crops, do not plant members of the Solarvateae family in land that has been previously irrigated with fluridone concentrations in excess of 5ppb in the previous year without direct consultation with a Albaugh Aquatic Specialist. It is recommended that a Albaugh Aquatic Specialist be consulted prior to commencing irrigation of these sites.

## PLANT CONTROL INFORMATION

FLURIDONE 6.3% selectivity is dependent upon dosage, time of year, stage of growth, method of application and water movement. The following categories, controlled, and partially controlled are provided to describe expected efficacy under ideal treatment conditions using higher to maximum label rates. Use of lower rates will increase selectivity of some species listed as controlled or partially controlled. Additional aquatic plants may be controlled, partially controlled, or tolerant to FLURIDONE 6.3%. It is recommended to consult a Albaugh Aquatic Specialist prior to application of FLURIDONE 6.3% to determine a plant's susceptibility to the planned treatment.

<sup>\*\*</sup> In lakes and reservoirs where one-half or greater of the body of water is treated, use the pond and static canal irrigation precautions. When applying FLURIDONE 6.3% to exposed sediments of aquatic sites such as lakes and reservoirs, follow these time frames prior to using water for irrigation once sites are reflooded.

<sup>\*\*\*</sup>When FLURIDONE 6.3% is applied to exposed sediments of dry or de-watered irrigation canals, treatments must be made at least 2 weeks prior to when the canals are to be refilled, and allow canals to refill for a minimum of 24 hours before using water for irrigation.

## Vascular Aquatic Plants Controlled by FLURIDONE 6.3%:

### **Submersed Plants:**

bladderwort (Utricularia spp.)
common coontail (Ceratophyllum demersum)
common elodea (Elodea canadensis)
egeria, Brazilian elodea (Egeria densa)
fanwort, cabomba (Cabomba caroliniana)
hydrilla (Hydrilla verticillata)
naiad (A/a/as spp.)
pondweed (Potamogeton spp., except Illinois pondweed)
watermilfoil (Myriophyllum spp., including M. spicatum x sibiricum hybrids)
widgeon grass (Ruppia maritime)

### **Immersed Plants:**

spatterdock (Nuphar luteum) water-lily (Nymphaea spp.) watershield (Brasenia schreberi)

# **Floating Plants:**

common duckweed (Lemna minor) Salvinia (Salvinia spp.)

# Vascular Aquatic Plants Partially Controlled by FLURIDONE 6.3%:

### **Submersed Plants:**

Illinois pondweed (Potamogeton illinoensis) limnophila (Limnophila sessiliflora) tapegrass, American eelgrass (Vallisneria americana)

## **Emersed Plants:**

alligatorweed (Alternanthera philoxeroides)
American lotus (Nelumbo lutea)
cattail (Typha spp.)
creeping waterprimrose (Ludwigia peploides)
parrotfeather (Myriophyllum aquaticum)
smartweed (Polygonum spp.)
spikerush (Eleocharis spp.)
waterpurslane (Ludwigia palustris)

## **Floating Plants:**

common watermeal (Wolffia columbiana)\*

### **Shoreline Grasses:**

barnyardgrass (Echinochloa crusgalli) giant cutgrass (Zizaniopsis miliacea) reed canarygrass (Philaris arundinaceae) southern watergrass (Hydrochloa caroliniensis) torpedograss (Panicum repens)

\*Consult with a Albaugh Aquatic Specialist about techniques to enhance efficacy of watermeal, including incorporation of Galleon S.C. Aquatic Herbicide into a FLURIDONE 6.3% treatment program, in difficult to control sites.

#### MIXING AND APPLICATION DIRECTIONS

The aquatic plants present in the treatment site should be identified prior to application to determine their susceptibility to FLURIDONE 6.3%. It is important to determine the area (acres) to be treated and the average depth in order to select the proper application rate. Do not exceed the maximum labeled rate for a given treatment site per annual growth cycle.

FLURIDONE 6.3% may be applied or metered directly into the treated area or diluted with water prior to application. Add the specified amount of FLURIDONE 6.3% to water in the spray tank during the filling operation. Surface and subsurface application of the spray can be made with conventional spray equipment. FLURIDONE 6.3% can also be applied near the surface of the hydrosoil using weighted trailing hoses. A minimum spray volume of 5 to 100 gallons per acre may be used. FLURIDONE 6.3% may also be directly metered into the pumping system where it is diluted with water.

### **Tank Mix Directions**

FLURIDONE 6.3% may be tank mixed with other aquatic herbicides and algaecides to enhance efficacy and plant selectivity provided that this label does not prohibit such mixing.

When tank mixing, it is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

To ensure compatibility, a jar test is recommended before field application of any tank mix combination. It is recommended to consult with Albaugh, LLC for latest tank mix recommendations.

**NOTE:** Tank mixing or use of FLURIDONE 6.3% with any other product which is not specifically and expressly authorized by the label shall be at the exclusive risk of the user, applicator and/or application adviser, to the extent allowed by applicable law.

## **Application Rate Calculation**

The amount of FLURIDONE 6.3% to be applied to provide the desired ppb concentration of active ingredient in treated water may be calculated as follows:

FLURIDONE 6.3% gallons required per treated surface acre = surfaces acres X average water depth of treatment site (feet) x desired ppb concentration of active ingredient

For example, the amount per acre of FLURIDONE 6.3% required to provide a concentration of 30 ppb of active ingredient in a 1-acre pond with an average depth of 5 feet is calculated as follows:

1 acre x 5 feet x 30 ppb x 0.0054 = 0.81 gallons per treated surface acre

0.81 gallons x 4 quarts/gallon = 3.2 guarts per treated surface acres

or

0.81 gallons x 128 ounces/gallon = 104 ounces per treated surface acre

# **Application to Ponds**

FLURIDONE 6.3% may be applied to the entire surface area of a pond. For single applications, rates may be selected to provide 30 to 90 ppb to the treated water. Use the higher rate within the rate range where there is a dense weed mass, when treating more difficult to control species, and for ponds less than 5 acres in size with an average depth less than 4 feet.

Application rates necessary to obtain these concentrations are shown in the following table. For additional application rate calculations, refer to the Application Rate Calculation section of this label.

Split or multiple applications may be used to control more difficult target plants and/or where dilution of treated water is anticipated; however, the sum of all applications must not exceed a total of 90 ppb per annual growth cycle.

Average Water Depth of Treatment Site (feet)	Gallons of FLURIDONE 6.3% per Treated Surface Acre		
	30 ppb	90 ppb	
1	0.16	0.48	
2	0.32	0.97	
3	0.48	1.45	
4	0.64	1.94	
5	0.81	2.43	
6	0.97	2.91	
7	1.13	3.40	
8	1.29	3.88	
9	1.45	4.37	
10	1.62	4.86	

<sup>\*</sup>To calculate the number of quarts of FLURIDONE 6.3% required, use the calculation as follows: gallons per surface acre x 4 quarts/gallon = quarts per surface acre.

**For example:** targeting a concentration of 30 ppb in a one acre pond with average depth of 5 feet would require 0.81 gallons or 3.2 quarts.

# **Application to Lakes and Reservoirs**

The following treatments may be used for treating both whole lakes or reservoirs and partial areas of lakes or reservoirs (bays, etc.). For best results in treating partial lakes and reservoirs, FLURIDONE 6.3% treatment areas should be a minimum of 5 acres in size. Treatment of areas smaller than 5 acres or treatment of narrow strips such as boat lanes or shorelines may not produce satisfactory results due to dilution by untreated water. Rate ranges are provided as a guide to include a wide range of environmental factors, such as, target species plants, susceptibility, selectivity and other aquatic plant management objectives.

Application Rates and methods should be selected to meet the specific lake/reservoir aquatic plant management goals.

# A. Whole Lake or Reservoir Treatments (Limited or No Water Discharge)

Single Application to Whole Lakes or Reservoirs

Where single applications to whole lakes or reservoirs are desired, apply FLURIDONE 6.3% at an application rate of 10 to 90 ppb. Application rates necessary to obtain these concentrations in treated water are shown in the following table. For additional rate calculations, refer to the Application Rate Calculation section of this label. Choose an application rate from the table below to meet the aquatic plant management objective.

Where greater plant selectivity is desired such as when controlling Eurasian watermilfoil and curlyleaf pondweed, choose an application rate lower in the rate range. For other plant species, it is recommended to contact a Albaugh Aquatic Specialist for determining when to choose application rates lower in the rate range to meet specific plant management goals. Use the higher rate within the rate range where there is a dense weed mass or when treating more difficult to control plant species. Retreatments may be required to control more difficult to control species or in the event of a heavy rainfall event where dilution of the treatment concentration has occurred. In these cases, a second application or more may be required; however, the sum of all applications cannot exceed 150 ppb per annual growth cycle. Refer to the section of this label entitled, **Split or Multiple Applications to Whole Lakes or Reservoirs**, for guidelines and maximum rate allowed.

SINGLE A	APPLICATION OF FLURI	
Average Water Depth of Treatment Site (feet)		URIDONE 6.3% per face Acre to Achieve
or freatment Site (reet)	10 ppb	90 ppb
1	0.05	0.48
2	0.10	0.97
3	0.16	1.45
4	0.21	1.94.
5	0.27	2.43
6	0.32	2.91
7	0.37	3.40
8	0.43	3.88
9	0.48	4.37
10	0.54	4.87

<sup>\*</sup>To calculate the number of quarts of FLURIDONE 6.3% required, use the calculation as follows: gallons per surface acre x 4 quarts/gallon = quarts per surface acre

**For example:** targeting a dose of 10 ppb in a 20 acre lake with average depth of 5 feet would require 0.27 gallons per surface acre or 1.0 quarts.

# **Split or Multiple Applications to Whole Lakes or Reservoirs**

To meet certain plant management objectives, split or multiple applications may be desired in making whole lake treatments. Split or multiple application programs are desirable when the objective is to use the minimum effective dose and, through the use of a water analysis, e.g. FasTEST, add additional FLURIDONE 6.3% to maintain this lower dose for the sufficient time to ensure efficacy and enhance selectivity. Water may be treated at an initial application concentration of 4 to 50 ppb. Additional split applications should be conducted to maintain a sufficient concentration for a minimum of 45 days or longer. In controlling Eurasian watermilfoil and curlyleaf pondweed and where greater plant selectivity is desired, choose an application rate lower in the rate range. For other plant species, it is recommended to contact a Albaugh Aquatic Specialist for assistance in selecting the appropriate concentrations and timing of application to meet specific plant management goals. When utilizing split or multiple applications of FLURIDONE 6.3%, the utilization of FasTEST is strongly

recommended to determine the actual concentration in the water over time. For split or multiple applications, the sum of all applications must not exceed 150 ppb per annual growth cycle.

**NOTE:** In treating lakes or reservoirs that contain functioning potable water intakes and the application requires treating within % mile of a potable water intake, no single application can exceed 20 ppb. Additionally, the sum of all applications cannot exceed 150 ppb per annual growth cycle.

### **B. Partial Lake or Reservoir Treatments**

Where dilution of FLURIDONE 6.3% with untreated water is anticipated, such as in partial lake or reservoir treatments, split or multiple applications may be used to extend the contact time to the target plants. The application rate and use frequency of FLURIDONE 6.3% in a partial lake is highly dependent upon the treatment area. An application rate at the higher end of the specified rate range may be required and frequency of applications will vary depending upon the potential of untreated water diluting the FLURIDONE 6.3% concentration in the treatment area. Use a rate at the higher end of the rate range where greater dilution with untreated water is anticipated.

### Treatment Areas Greater Than 1/4 Mile from a Functioning Potable Water Intake

For single applications, apply FLURIDONE 6.3% at application rates from 30 to 150 ppb. Split or multiple applications may be made; however, the sum of all applications cannot exceed 150 ppb per annual growth cycle. Split applications should be conducted to maintain a sufficient concentration in the target area for a period of 45 days or longer. The use of a FasTEST is recommended to maintain the desired concentration in the target area over time.

# Treatment Areas within 1/4 Mile of a Functioning Potable Water Intake

In treatment areas that are within ¼ mile of a potable water intake, no single application can exceed 20 ppb. When utilizing split or multiple applications of FLURIDONE 6.3% for sites which contain a potable water intake, a FasTEST is required to determine the actual concentration in the water. Additionally, the sum of all applications cannot exceed 150 ppb per annual growth cycle.

### **Application to Sediments of Dry or De-Watered Aquatic Sites**

For application of FLURIDONE 6.3% to sediments of dry or de-watered aquatic sites, including exposed sediments of lakes or reservoirs, irrigation canals, non-irrigation canals and drainage canals, apply a maximum of 4 gallons of product per surface acre per annual growth cycle. Apply FLURIDONE 6.3% evenly to the sediment surface, with a minimum spray solution of 30 to 100 gallons per surface acre. High levels of organic matter in treated-sediments may reduce efficacy. FLURIDONE 6.3% may be applied with other aquatic herbicides labeled for this use. It is recommended that a Albaugh Aquatic Specialist be consulted for further use recommendations.

## Direct foliar application to floating, topped-out and emerged aquatic vegetation.

For application of FLURIDONE 6.3% to floating, topped-out and emerged aquatic vegetation in ponds, lakes, reservoirs, drainage canals and irrigation canals, including dry or de-watered areas of these sites, apply a maximum of 4 gallons of product per surface acre per annual growth cycle. Apply FLURIDONE 6.3% evenly to the treatment area using properly calibrated broadcast equipment in a minimum spray solution of 20 to 100 gallons per surface acre. For treatment of vegetation in or on water, do not exceed a water concentration of 150 ppb. Spot treatments can be made with up to 5% FLURIDONE 6.3% by volume when application rate does not exceed 4 gallons FLURIDONE 6.3% per surface acre. It is recommended that a Albaugh Aquatic Specialist be consulted for site specific recommendations.

# **Application to Drainage Canals and Irrigation Canals**

### **Static Canals:**

In static drainage and irrigation canals, apply FLURIDONE 6.3% at the rate of 30 to 150 ppb per treated surface acre. The maximum application rate or sum of all application rates cannot exceed 150 ppb per annual growth cycle.

# **Moving Water Canals:**

In slow moving bodies of water use an application technique that maintains a concentration of 10 to 40 ppb in the target area for a minimum of 45 days. FLURIDONE 6.3% can be applied by split or multiple broadcast applications or by metering in the product to provide a uniform concentration of the herbicide based upon the flow pattern. The use of a FasTEST is recommended to maintain the desired concentration in the target area over time.

## Static or Moving Water Canals Containing a Functioning Potable Water Intake

In treating a static or moving water canal which contains a functioning potable water intake, applications of FLURIDONE 6.3% greater than 20 ppb must be made more than ¼ mile from a functioning potable water intake. Applications less than 20 ppb may be applied within ¼ mile from a functioning potable water intake; however, if applications of FLURIDONE 6.3% are made within ¼ mile of a functioning potable water intake, a FasTEST analysis must utilized to demonstrate that concentrations do not exceed 150 ppb at the functioning potable water intake.

Application Rate from a functioning potable water intake; however, if applications of FLURIDONE 6.3% are made within  $\frac{1}{4}$  mile of a functioning potable water intake, a FasTEST analysis must utilized to demonstrate that concentrations do not exceed 150 ppb at the functioning potable water intake.

Application Rate Calculation — Moving Water Drainage and Irrigation Canals

The amount of FLURIDONE 6.3% to be applied through a metering system to provide the desired ppb concentration of active ingredient in treated water may be calculated as follows:

- 1. Average flow rate (feet per second) x average canal width (ft.) x average canal depth (ft.) = CFS (cubic feet per second).
- 2. CFS x 1.98 = acre feet per day (water movement)
- 3. Acre feet per day x desired ppb x 0.0054 = Gallons FLURIDONE 6.3% required per day

# STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Keep from freezing. Store in original container only. Do not store near feed or foodstuffs. In case of leak or spill, use absorbent materials to contain liquids and dispose as waste.

**PESTICIDE DISPOSAL:** Wastes resulting from use of this product must be used according to label directions or disposed of at an approved waste disposal facility.

## **CONTAINER HANDLING:**

## Nonrefillable Container.

DO NOT reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and

dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Triple rinse containers small enough to shake (capacity  $\leq$  5 gallons) 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 % 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.

Triple rinse containers too large to shake (capacity >5 gallons) as follows: Empty the 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.

Pressure rinse as follows: Empty the remaining contents into application equipment or 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 Container.

Refill this container with pesticide only. DO NOT reuse this container for any other purpose. Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

Triple rinse as follows: To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

When this container is empty, replace the cap and seal all openings that have been opened during use; return the container to the point of purchase or to a designated location. This container must only be refilled with a pesticide product. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices.

Check for leaks after refilling and before transport. DO NOT transport if this container is damaged or leaking. If the container is damaged, or leaking, or obsolete and not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling, if available, or dispose of container in compliance with state and local regulations.

### **TERMS AND CONDITIONS**

If terms of the following Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, to the extent consistent with applicable law, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer,

## Inherent Risks of Use, and Limitation of Remedies.

Albaugh, LLC warrants that the product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ALBAUGH, LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

#### **Inherit Risks**

It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Albaugh, LLC or the seller. To the extent consistent with applicable law, all such risks shall be assumed by buyer.

To the extent consistent with applicable law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories) shall be limited to, at Albaugh, LLC's election, one of the following:

- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used.

To the extent consistent with applicable law, Albaugh, LLC shall not be liable for losses or damages resulting from handling or use of this product unless Albaugh, LLC is promptly notified of such losses or damages in writing. In no case shall Albaugh, LLC be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Albaugh, LLC or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

### **SUB-LABEL B:**

- SUB-LABEL A Commercial applicator use
- SUB-LABEL B Consumer use

# **FLURIDONE 6.3%**

AQUATIC HERBICIDE

AC	Π	VE	INGRE	DIE	NΤ	

Fluridone: 1-methyl-3-phenyl-5-[3-(trifluoromethyl)phenyl]-4(1H)-pyridinone	6.3%
OTHER INGREDIENTS:	93.7%
TOTAL: 1	.00.0%

Contains 0.5 pounds active ingredient per gallon.

## **KEEP OUT OF REACH OF CHILDREN**

### DANGER/PELIGRO

Refer to the back panel and label booklet for First Aid and additional precautionary information and Directions for Use.

[optional text:]

For early-season floating and submersed weed removal and prevention For selective control of floating and submersed aquatic weeds Controls Duckweed, Pondweed, Milfoil, Hydrilla, PLUS many more!

Controls many submersed and floating aquatic weeds

- Apply early-season to prevent weeds from ever becoming a problem
- Apply in-season to remove nuisance aquatic weeds
- Systemic, complete kill including the roots
- Easy-to-apply

EPA Reg. No. 42750-xxx {Part No.}

EPA Est. No. xxxxxx-xx-xxx

**NET CONTENTS:** \_\_\_\_\_ Gallons

### **MANUFACTURED BY:**

Albaugh, LLC Ankeny, IA 50021

## **PRECAUTIONARY STATEMENTS**

## **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

## **DANGER**

Corrosive. Causes irreversible eye damage. Harmful if swallowed. Avoid contact with skin. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses), long-sleeved shirt and long pants, socks, shoes, and chemical resistant (nitrile or butyl;  $\geq$  14 mils) gloves. Wash thoroughly with soap and water after handling and before eating, drinking, and chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

	FIRST AID				
IF IN EYES:	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.				
IF	Call a poison control center or doctor immediately for treatment advice.				
SWALLOWED:	Have person sip a glass of water if able to swallow.				
	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 ON SKIN OR	Take off contaminated clothing.				
CLOTHING:	Rinse skin immediately with plenty of water for 15-20 minutes.				
	Call a poison control center or doctor for treatment advice.				
Have the product container or label with you when calling a poison control center or doctor or going for treatment.					
EMERGENCY NUMBERS: 1-800-424-9300 – CHEMTREC – Transportation or Spill					
<b>NOTE TO PHYSICIAN:</b> Probable mucosal damage may contraindicate the use of gastric lavage.					

# **FLURIDONE 6.3%**

## AQUATIC HERBICIDE

FLURIDONE 6.3% is a selective systemic aquatic herbicide for management of fresh water aquatic vegetation in quiescent waterbodies (including swimming ponds, fishing ponds, livestock tanks, and lakes).

### **Product Information:**

[Brand name] contains fluridone, an aquatic herbicide that provides broad spectrum weed control.

- Stops photosynthesis in treated weeds
- No livestock watering restrictions following application
- No fishing or swimming restrictions following application.

### When and where to use:

Apply early-season to prevent weeds from ever becoming a problem. Can also be used in-season to control established weeds.

- Controls most submerse weeds<sup>1</sup>
- Controls most floating leaf weeds<sup>1</sup>
- Results within 30 45 days with early application
- Season long control

#### How to use:

Apply product directly to water evenly around the perimeter of the waterbody or directly over areas where weeds typically grow.

## [optional text:]

- 128 fl. oz. (1 gallon) treat up to 1 acre, 5 feet deep
- 64 fl. oz. treat up to 1/2 acre, 5 feet deep
- 32 fl. oz. treat up to 1/4 acre, 5 feet deep
- 16 fl. oz. treat up to 1/8 acre, 5 feet deep}

# Refer to label booklet for additional precautionary statements and directions for use.

**Notice:** Read the entire label before using. Use only according to label directions. Before buying or using this product, read Warranty Disclaimer and Misuse statements inside label booklet. If terms are unacceptable, return at once unopened.

### **MANUFACTURED BY:**

Albaugh, LLC Ankeny, IA 50021

See label for details

### STOP! PLEASE READ ENTIRE LABEL BEFORE USE.

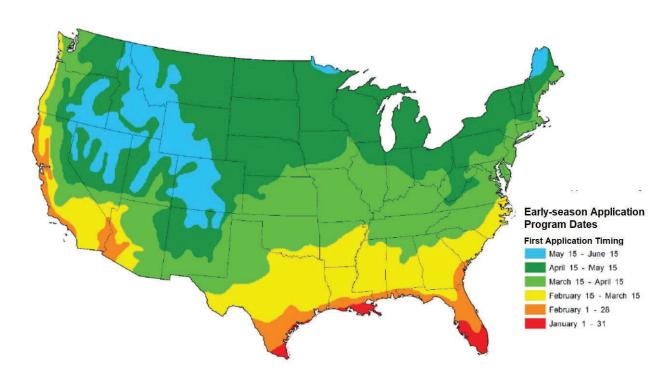
### PHYSICAL AND CHEMICAL HAZARDS

Do not mix or allow coming in contact with oxidizing agents & fire retardants. Hazardous chemical reaction may occur.

### **DIRECTIONS FOR USE**

It is a violation for Federal Law to use this product in a manner inconsistent with its labeling.

## When to apply



For best results, apply this product in the early-season before many nuisance aquatic plants begin to actively grow, or in-season to control many established nuisance aquatic plants. Follow up with a second application. Regardless of your situation, for best results apply in the spring or early summer.

**Treatment Program:** Split the treatment into two (2) applications to provide optimal results and extended herbicide exposure. Find the recommended date range of your first application from your region on the map. Depending upon the target weed species and waterbody dimensions, use Table 1 or 2 to determine the total amount of product to use for the season. Apply ½ that amount during the range of dates indicated (or earlier if submersed plant growth is evident). Wait one month and apply the remaining ½ to complete the program.

**Example:** A half-acre pond with an average depth of 5 feet, targeting control of sago pondweed (Table 1). A total of 64 fl. oz. of product is needed for the season. Apply this amount of product in two applications of 32 fl. oz. each, one month apart.

# Where and how to apply

This product is formulated for direct application to the water. Simply apply the appropriate amount of product directly in the water. You may also apply the product diluted 1:1 with water. For best results, target coverage in areas where aquatic weeds typically occur or are present

# **Susceptible Aquatic Weeds for Use Rates in Table 1**

Azolla bladderwort common elodea egeria, Brazilian elodea hydrilla naiads

pondweed (except Illinois pondweed)

tapegrass, American eelgrass

watermilfoils (except parrot feather)

Table 1. Application Rate (fl. oz.
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•	rubic 11 Application Rate (in o21)				
Average Bond Donth (ft.)	Pond Size (acre)				
Average Pond Depth (ft.)	1/8	1/4	1/2		
1	3	6	13		
2	6	13	26		
3	10	19	38		
4	13	26	51		
5	16	32	64		
6	19	38	77		
7	22	45	90		
8	26	51	102		

# **Susceptible Aquatic Weeds for Use Rates in Table 2**

American Lotus Common coontail Duckweed Fanwort, cabomba Illinois pondweed Parrot feather

Spatterdock Spikerush

. Waterlily

watershield

Table 2. Application Rate (fl. oz.)

Average Bond Donth (ft.)	Pond Size (acre)		
Average Pond Depth (ft.)	1/8	1/4	1/2
1	6	13	26
2	13	26	51
3	19	38	77
4	26	51	102
5	32	64	128
6	38	77	154
7	45	90	179
8	51	102	205

#### For control of watermeal

Watermeal is a small floating plant that may be difficult to control. For help in identification please contact your local county extension agent. For control of watermeal, use rates listed in Table 3. Applications should be made in the early spring and split into two applications. If there is outflow leaving the waterbody, consider splitting the application into three applications, one month apart.

Table 3. Application Rate (fl. oz.)			
Average Pond Depth (ft.)	Pond Size (acre)		
	1/8	1/4	1/2
1	7	15	31
2	15	31	62
3	23	46	93
4	31	62	125
5	39	78	156
6	46	93	187
7	54	109	218
8	62	125	250
10	78	156	312

For other pond sizes and depths, use the formula below to calculate the amount of product needed for treatment:

fl. oz product = pond acreage x depth (feet) x 62.5

**Example:** A 1/2 acre pond with an average depth of 8 feet, targeting control of watermal. A total of 250 fl. oz. of product is needed for the season. Apply this amount of product in two applications of 125 oz. each, one month apart.

The maximum application rate or sum of all application rates per annual growing cycle is 250 fl. oz. per acre, 4 feet deep in ponds less than 10 acres in size.

### **How FLURIDONE 6.3% works**

This product controls unwanted aquatic vegetation by restricting the plant's ability to make food, causing it to die. This involves inhibiting development of yellow pigments that protect a plant's chlorophyll from decomposition by sunlight. As the plant's chlorophyll decreases, so does its capacity to produce food.

## What to expect

This product is selective, and controls target weeds slowly. It lets desirable vegetation re-establish itself. It does not result in oxygen depletion or fish kill. Target aquatic weeds remain under control for a full season and often longer. It takes 30 to 60 days for this product to control established weeds. You can expect full results within 90 days. Bleaching (turning white) on the terminal bud or growing points of the plant is a common symptom and a visual indication the product is working. Some plants are less susceptible and may require treatment at the maximum label rate.

### **USE RESTRICTIONS**

**Obtain Required Permits:** Consult with appropriate state or local water authorities before applying this product. Permits may be required by state or local public agencies.

**Drinking, Fishing and Swimming:** Drinking, fishing and swimming are allowed following application. Note below application restrictions around potable water intakes.

**Livestock/Pet Consumption:** Drinking by livestock and pets is allowed following application.

**Potable Water Intakes:** Do not apply this product within one-fourth mile (1,320 feet) of any functioning water intake. It is recommended that users contact their local government agency responsible for water management for information on water intake locations.

**Application rates:** Do not apply more than 250 fl. oz. of this product per four acre feet (one surface acre, four feet deep) per annual growing cycle in any waters less than 10 acres in size.

**Irrigation:** Do not apply in bodies of water that will be used for crop irrigation.

### **ENVIRONMENTAL HAZARDS**

Follow use directions carefully so as to minimize adverse effects on non-target organisms. Trees and shrubs growing in treated water may occasionally develop chlorosis. Do not apply directly to tidal saltwater sites. Do not apply more than 250 fl. oz. of this product per four acre feet (one surface acre, four feet deep) per annual growing cycle in any waters less than 10 acres in size.

### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in original container only. Do not store near feed or foodstuffs. In case of leak or spill, contain liquids and dispose as waste.

# PESTICIDE DISPOSAL AND CONTAINER HANDLING:

**Nonrefillable Container:** DO NOT reuse or refill this container. If empty: Place in trash or offer for recycling if available. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

**Warranty Disclaimer:** Albaugh, LLC warrants that this product conforms to the chemical description on the product label. Testing and research have also determined that this product is reasonably fit for the uses described on the product label. To the extent consistent with applicable law, Albaugh, LLC makes no other express or implied warranty of fitness or merchantability nor any other express or implied warranty and any such warranties are expressly disclaimed.

**Misuse:** Federal law prohibits the use of this product in a manner inconsistent with its label directions. To the extent consistent with applicable law, the buyer assumes responsibility for any adverse consequences if this product is not used according to its label directions. In no case shall Albaugh, LLC be liable for any losses or damages resulting from the use, handling or application of this product in a manner inconsistent with its label.