# POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING

## **CLIPPER Herbicide®**

ACTIVE CONSTITUENT: Each tablet contains 15 g FLUMIOXAZIN

GROUP 14 HERBICIDE

For the control of aquatic weeds in agricultural, non-agricultural, pasture and natural aquatic systems, including all bodies of fresh water which are non-flowing and the margins of streams, lakes, dams and channels which are slow moving or quiescent.

For use by accredited persons only.

NET CONTENTS: 1.5 – 6.0 kg (10 – 40 x 150 g tablets)



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#### **GENERAL INSTRUCTIONS**

CLIPPER Herbicide is a fast-acting contact herbicide that controls selected floating, emergent and submerged aquatic weeds and algae. It is most effective when applied to young, actively growing weeds in water with pH less than 8.0.

CLIPPER Herbicide is a large-diameter, effervescent herbicide tablet contained in a water-soluble wrapping which can be applied in two ways:

A. thrown directly into the water body where the target weeds grow, without the aid of spraying equipment, or

B. dissolved in water and applied with conventional spraying equipment.

When using CLIPPER Herbicide, remove the tablets from the plastic packets but DO NOT remove the water-soluble wrapping around the tablet. DO NOT touch the tablets with wet hands or place on wet surfaces. DO NOT damage the plastic packets that contain the tablets. Open plastic packets only as needed. Once opened, use ALL tablets in the plastic packet at once. DO NOT reseal the plastic container.

Rapid decomposition of vegetation from herbicide treatment can result in loss of oxygen from the water. A sudden decrease in dissolved oxygen can result in fish suffocation. When treating dense vegetation, it is advisable to treat the water body in sections (not more than 50% at one time) to avoid an overall decrease in dissolved oxygen. Applications should be at least 14 days apart.

#### **APPLICATION**

The most appropriate application method requires a thorough understanding of the following aspects of the water body to be treated:

- 1. Volume of water to be treated. Since the rate of CLIPPER Herbicide is expressed as a concentration, the exact volume of the water body needs to be known. Once the exact volume is known, the corresponding number of tablets can be calculated.
  - Firstly, calculate the average depth of the water body by taking a representative number of depth measurements. Water bodies are seldom of uniform depth, and a sufficient number of measurements from all areas (sides and centre, at 5-10m intervals) should be taken to calculate the average depth.
  - Multiply the average depth by the Surface area of the water body to determine the volume in cubic metres.
- 2. Surface area of the water body. This is required to calculate the appropriate Clipper Herbicide rate when spraying the surface of the pond for control of floating weeds, or when spraying the foliage of emergent weeds that grow from the water.
  - The simplest method to calculate the Area is to use basic equations for common shapes which can be applied if the water body closely resembles a circle, square, rectangle or trapezoid.

#### Circular shape

Measure Circumference at the edge of the water. Then calculate the radius using the formula  $r = C/2\pi$ . Then calculate the Area using the formula  $A = \pi r^2$ .

#### Square or rectangular shape

Measure the width and the length of the water body. Multiply length by width to determine Area in square metres.

#### Trapezoid shape

Measure the length of the unequal sides and calculate the average length. Multiply by the width to determine Area in square metres.

#### Irregular shapes

Firstly, calculate the average depth of the water body by taking a representative number of depth measurements from all areas of the water body. Then use one of the following methods to determine the Area in square metres:

- a. Divide the area into various shapes, calculate individually and add them together
- b. Use a hand-held Global Positioning System (GPS) device
- c. Use a Geographical Information website e.g. Google Earth or Bing maps.

Use the following approximation to check your calculations.

		Surface Area of the Water body					
		25 m <sup>2</sup> Area	50 m <sup>2</sup> Area	100 m <sup>2</sup> Area	200 m <sup>2</sup> Area	400 m <sup>2</sup> Area	800 m <sup>2</sup> Area
		Number of CLIPPER tablets required to achieve 200 – 400 parts per billion				per billion	
	0.5m	Use Injection Method		1 - 2	2 - 3	3 - 5	6 - 11
Average depth of the Water body	1.0m	Use Injection method	1 - 2	2 - 3	3 - 6	6 - 11	11 - 22
	1.5m	Use Injection method	1 - 2	2 - 4	4 - 8	8 - 16	16 - 32
	2.0m	1 - 2	2 - 3	3 - 6	6 - 11	11 - 22	22 - 43
	2.5m	1 - 2	2 - 4	4 - 7	7 - 14	14 - 27	27 - 54
	3.0m	1 - 2	2 - 4	4 - 8	8 - 16	16 - 32	32 - 64

- 3. Identification of all weeds present in the water body.
- 4. Growth form of the weeds present in the water body. Aquatic weeds typically grow (a) completely submerged, (b) emergent (one portion of the plant below the water and another above), and (c) floating on or near the surface with roots dangling in the water column.
- 5. The spatial distribution of the weeds in the water body, e.g. uniformly distributed or growing in clusters.
- 6. Weed stage whether the weed population is established, consisting mostly of fully grown specimens, or re-infesting / establishing with predominantly seedling and immature specimens present after previous control attempts. This aspect will determine the appropriate rate.
- 7. Physical barriers that could prevent thorough distribution of the herbicide in the water body. Examples include fallen trees or logs, rocks, sand banks, and large shallow areas.
- 8. pH of the water to be treated. The pH levels in a water body can fluctuate daily due to photosynthesis and respiration, usually approaching highest levels between noon and mid-afternoon. Measure pH of the water body before the application of CLIPPER Herbicide early in the morning.

Every control situation is different and the appropriate treatment strategy for CLIPPER Herbicide should only be decided after consideration of the diversity of weeds to be controlled, weed stage and density, the various growth forms of the weeds (submerged, emergent or floating), their spatial distribution in the water body and physical barriers that could prevent proper distribution of the herbicide.

#### A. Direct application

When applied directly, CLIPPER Herbicide tablets are thrown into the water as per the Directions for Use. Once applied, the tablets will penetrate foliage on the surface of the water, sink to the bottom and start to release the herbicide throughout the water column.

With this method, CLIPPER Herbicide tablets are thrown by a gloved hand, or by using a mechanical device like a slingshot or drone, into the water from an elevated vantage point. CLIPPER Herbicide tablets can easily be thrown by hand up to 40 metres away from the launch point.

Note: Application by spray from a drone is not permitted.

When applied by direct application, CLIPPER Herbicide is effective for control of aquatic weeds that grow submerged or floating, as well as emergent weeds - provided they are growing in the water with at least 50% of their foliage submerged.

After the appropriate number of CLIPPER Herbicide tablets for the situation has been calculated, apply the tablets by throwing them into the water to obtain the best possible distribution of the herbicide to control the range of weeds present. If all weeds are uniformly distributed in the water body, position the tablets accordingly. If the weeds are growing in clusters, apply more tablets in dense areas and fewer in less dense areas. If a physical barrier could prevent distribution of the herbicide to some parts of the water body, make sure to apply a proportionate number of tablets to the isolated areas.

Ensure that the CLIPPER Herbicide tablets penetrate foliage on the surface and sink to the bottom. If there is a cluster of weeds (e.g. dense water lily) through which the CLIPPER Herbicide tablets may not penetrate, an alternative strategy may be to concentrate tablets around the cluster to thin it out or reduce its size.

CLIPPER Herbicide tablets start to release the herbicide active ingredient as soon as they come into contact with water, and it takes approximately 30 minutes for the tablet to dissolve completely.

#### B. Application with conventional spraying equipment

Certain aquatic weed control situations may require CLIPPER Herbicide tablets to be dissolved in water and applied with spraying equipment. To ensure even mixing, tear open the required number of packets and add the tablets complete with water-soluble wrapping to the full volume of water in the spray tank with the in-tank agitation system already engaged. Wait for the tablets to dissolve completely before commencing application. If required, add a spray additive registered for aquatic use once CLIPPER Herbicide tablets are completely dissolved. Maintain adequate agitation during application and use the tank mix promptly.

The following situations indicate where CLIPPER Herbicide tablets can be applied with conventional spraying equipment by dissolving the appropriate number of tablets in water and applying the herbicide solution as a foliar spray to control floating weeds, or injected into the water column to control submerged, emergent or floating weeds.

- 1. When the volume of water in the water body is less than the minimum volume required to dissolve a single CLIPPER Herbicide tablet at the required rate. In this instance, prepare a spray solution at the required rate, and only apply a portion thereof until the required dosage is achieved. Dispose of the excess spray solution by following the disposal quidelines under STORAGE and DISPOSAL on this label.
- 2. When the water body is shallow with a big surface area, resulting in a limited number of CLIPPER tablets required that will not give proper distribution throughout the water body. In this instance, dissolve the required number of Clipper Herbicide tablets in a spray solution and inject the solution uniformly to the treatment area.
- 3. When physical obstacles could prevent the herbicide from being distributed to all areas of the water body. Apply the diluted spray mix to all areas, including the isolated parts.
- 4. When the target weed is a floating plant that is better controlled by foliar application than injection. Follow the surface spray recommendation.
- 5. When spot-spraying is required. Follow the surface spray recommendation.
- 6. <u>To spray weeds growing at the waters edge or the foliage of emergent weeds growing in</u> the water. Follow the surface spray recommendation.

#### Number and timing of applications

Treatment of a water body may involve one, or multiple applications. If multiple, the number of applications is determined by:

1. The number and diversity of weeds to be controlled. The diversity of weeds and the manner in which they grow can influence the number of applications. In particular, the presence of floating filamentous algae in all strata of the water column tends to absorb

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most of the available herbicide active ingredient first, leaving less than lethal doses to control other remaining weeds. In this instance, subsequent applications may be required to control other weeds with slower metabolic rate once the prominent weed has been removed.

- 2. Density of the weeds. Very dense populations of the target weed with corresponding high biomass may require multiple applications of CLIPPER Herbicide to be fully controlled. Often, physical lack of access to dense masses of weed means that they need to be treated in stages removing sections at a time in order to gain access to other parts.
- 3. Differences in susceptibility to CLIPPER Herbicide between weeds. For example, *Egeria densa* is known to be slower to respond to treatment with CLIPPER Herbicide than most other common aquatic weeds. In this instance, more susceptible species will be controlled after the first application, and follow-up applications may be required to control less susceptible weeds.
- 4. Temperature and the amount of direct sunlight received by the water body. While sunlight is a vital component to its mode of action, water and air temperature affect the speed of uptake and metabolism of CLIPPER Herbicide in the target weed. CLIPPER Herbicide works better under warm conditions and when the treatment area is fully exposed to direct sunlight. DO NOT apply CLIPPER Herbicide during the winter months when weeds are not growing actively and/or when low temperatures and low light intensity combine to create less favourable conditions for the herbicide to work.
- 5. CLIPPER Herbicide breaks down by hydrolysis and has a short half-life in water. The half-life of CLIPPER Herbicide tablets in water is directly affected by pH of the water. The higher the pH, the shorter the half-life. Weeds that grow in alkaline water may require more applications of CLIPPER Herbicide compared to weeds growing in acidic water to achieve the same degree of control. DO NOT apply CLIPPER Herbicide to the water column when the pH of the water exceeds 8.0 at the time of application. Use only as a foliar application in a buffered spray solution against floating weeds in such conditions.
- 6. The pH of the water body can increase and exceed 8.0 by mid-day due to photosynthesis. To fully utilize herbicidal activity of CLIPPER Herbicide related to pH, available heat and light intensity during daylight hours, always apply CLIPPER Herbicide early in the morning. DO NOT apply CLIPPER Herbicide in the afternoon or when prolonged cloud cover is expected. Semi-shaded or permanently shaded sections of the water body may require additional applications compared to sunny areas.

#### Frequency of applications

Treatment of a water body may involve one, or sequential applications. If more than one, frequency of application is influenced by the same factors that influence the number of applications. In addition, timing of subsequent applications is influenced by:

- 1. Whether or not the dominant weed or weeds controlled by the initial application are still present and growing. In some instances, it may be advisable to postpone follow-up applications until the dominant target weed is completely controlled or affected by the herbicide before making a follow-up application.
- 2. Re-application interval for CLIPPER Herbicide tablets is 14 days or longer depending on the situation.DO NOT re-apply within the first 14 days.
- 3. DO NOT apply more than three times in a single treatment. Only one treatment per year should be required, not including spot-spraying or targeted clean-up sprays to remove weed survivors or re-infestations.

## Special considerations when applying to margins of larger natural aquatic systems (streams, lakes) which are slow moving or quiescent

This may be a situation where sections of a weir, dam or canal have become infested with aquatic weeds that need to be controlled for reasons of access, water contamination and to prevent further spread.

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- 1. Determine the actual infested area and depth that needs to be treated and whether a surface spray or subsurface tablet application will be used.
- 2. Check on the current/water movement that is likely to occur during treatment. This can be done by dropping a half full plastic bottle in the water and observing how far and fast it moves over time.
- 3. If there is an obvious current, ie. the bottle moves more than about 1m per minute, then it is likely that this could disperse the active ingredient away from the target to off-site areas.
- 4. In the above case a temporary water curtain would be required to limit product movement. Shade cloth and floats can be used for this.
- 5. Check carefully with the organisation that is responsible for the management of that water body about specific legislation or other requirements that may affect this operation and make sure it is compliant.
- 6. Post appropriate warning signs to limit use of this water as per the withholding periods on the label.

#### **SPRAYER CLEANUP**

When cleaning spraying equipment, wear cotton overalls buttoned to the neck and wrist and elbow-length chemical resistant gloves.

After CLIPPER Herbicide is applied by spraying equipment, the following steps must be taken to clean the spray equipment.

- 1. Completely drain the spray tank, rinse the sprayer thoroughly, including the inside and outside of the tank and all in-line screens.
- 2. Fill the spray tank with clean water and flush all hoses, booms, screens and nozzles.
- **3.** Add 1 litre of 3% household ammonia or similar alkaline based tank cleaner for every 100 litres of water, circulate through sprayer for five minutes, then flush all hoses, booms, screens and nozzles for a minimum of fifteen minutes.
- **4.** Drain tank completely.
- **5.** Add enough clean water to the spray tank to allow all hoses, booms, screens and nozzles to be flushed for two minutes.
- **6.** Remove all nozzles and screens and rinse them in clean water.

Equipment with CLIPPER Herbicide residue remaining in the system may result in injury to subsequently treated vegetation.

#### **SPRAY DRIFT RESTRAINTS**

Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift

DO NOT allow bystanders to come into contact with the spray cloud.

DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.

DO NOT apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application.

DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.

DO NOT apply by a boom sprayer unless the following requirements are met:

• Spray droplets not smaller than a COARSE spray droplet size category.

#### **RESTRAINTS**

**DO NOT** use unless accredited by the Supplier. Contact the Supplier for details.

**DO NOT** use in water utilized for commercial fish or crustacean farming.

**DO NOT** apply to intertidal or estuarine areas.

**DO NOT** apply to water bodies or areas where the herbicide cannot be contained.

**DO NOT** apply if treated water can overflow or spill into unintended areas.

**DO NOT** apply to areas where the water is flowing. Any water movement should be contained by the use of a temporary water curtain. If flow rates outside the treated area exceed 1 metre/minute, a temporary water curtain is required to limit product movement. Shade cloth and floats can be used for this.

**DO NOT** apply as a direct tablet application or water column treatment to water bodies where the pH exceeds 8.0 at the time of application.

**DO NOT** apply during the months May to September (NSW, VIC, TAS, WA south of 28<sup>th</sup> S parallel) or June to August (NT, QLD and WA north of 28<sup>th</sup> S parallel).

Observe the withholding periods when applying CLIPPER Herbicide to water that may be used for irrigation.

Application of CLIPPER Herbicide to public aquatic areas may require special approval and/or permits. Consult with local authorities, if required.

**DO NOT** apply more than three times in a single treatment (one full treatment may comprise up to 3 applications with around 14 days intervals). Only one full treatment per year should be required, not including spot-spraying or targeted clean-up sprays to remove weed survivors or reinfestations.

**DO NOT** apply if heavy rain or storms are forecast within 3 days.

#### **DIRECTIONS FOR USE**

A. Water bodies deeper than 0.5m with estimated water volume greater than 37.5 m<sup>3</sup>, with no physical barriers to restrict water circulation.

SITUATION	Weeds Controlled	RATE	CRITICAL COMMENTS
Control of floating weeds in enclosed water bodies and margins of larger open aquatic systems,	Amazon Frogbit (Limnobium laevigatum) Azolla (A.pinnata and A. filculoides) Duckweed (Lemna spp) Salvinia (S. molesta) Water Lettuce (Pistia stratiotes)	Direct Tablet Application  High Concentration: Apply 1 tablet for every 37.5 cubic metres of water to achieve 400 parts per billion (ppb)	Refer to GENERAL INSTRUCTIONS and APPLICATION on this label to determine the appropriate application type.  Throw the required number of tablets directly into the water to achieve uniform distribution of the herbicide throughout the water body.
including natural water bodies		Low concentration: Apply 1 tablet for every 75 cubic metres of water to achieve 200 ppb	Alternatively, should the weeds grow in clusters, concentrate the tablet application in the densest areas.

Use the High concentration to control dense or established weed populations, and when floating filamentous algae is also present in the water body.

Use the Low concentration to control low-density, establishing or re-establishing weed populations, or as a clean-up treatment to control isolated survivors from previous applications.

Repeat after 14-21 days if required.

#### Surface Spray

Including foliar application, spot-spraying and clean-up sprays to control survivors from previous applications.

Refer to GENERAL INSTRUCTIONS and APPLICATION on this label to determine the appropriate application type.

Mix with water having a pH between 5 and 7. If water pH is higher than 7, buffer the spray solution to the desired pH range before adding Clipper tablets.

### High Concentration

1 tablet for every 50L of spray solution plus approved aquatic adjuvant/surfactant @ 0.5 -1% v/v Apply at a rate of 12-15 litres of spray solution per 100 m<sup>2</sup> to achieve thorough coverage of the foliage.

Take care to also treat those weeds in difficult-to-reach areas, growing at the water's edge or obscured by physical barriers.

#### Low Concentration

1 tablet for every 100L of spray solution plus approved aquatic adjuvant/surfactant @ 0.5 -1% v/v

Use the High rate to control dense or established weed populations.

Use the Low rate to control low density, establishing or reestablishing weed populations.

Surface spraying can also be used in conjunction with Direct tablet application in a program

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			treatment to control dense populations of <i>Salvinia</i> and Amazon frogbit.  Repeat after 14-21 days if required.
Control of submerged and emergent weeds in enclosed water bodies and margins of larger open aquatic systems, including natural water bodies	Blue Water Lily (Nymphaea spp.) Blunt pondweed (Potamogeton ochreatus) Cabomba (C. caroliniana) Floating filamentous algae (Cladophora spp., Spirogyra spp.) Hornwort (Ceratophyllum demersum) Mexican Water lily (N.mexicana) Slender knot or Smartweed (Persicaria decipiens) Water stargrass (Heteranthera zosterifolia) Yellow water poppy (Hydrocleys nymphoides)	Direct Tablet Application  High Concentration: Apply 1 tablet for every 37.5 cubic metres of water to achieve 400 parts per billion (ppb)  Low Concentration: Apply 1 tablet for every 75 cubic metres of water to achieve 200 ppb	Refer to GENERAL INSTRUCTIONS and APPLICATION on this label to determine the appropriate application type.  Throw the required number of tablets directly into the water to achieve uniform distribution of the herbicide throughout the water body.  Alternatively, should the weeds grow in clusters, concentrate the tablet application in the densest areas.  Use the High concentration to control dense or established weed populations, and when floating filamentous algae is also present in the water body.  Use the Low concentration to control low density, establishing or re-establishing weed populations, or as a clean-up treatment to control isolated survivors from
			previous applications.  Repeat after 14-21 days if required.
	Leafy Elodea (Egeria densa)	Apply 1 tablet for every 37.5 cubic metres of water to achieve 400 parts per billion (ppb)	Control of Leafy Elodea is directly related to the amount of direct sunlight on the water body. Under warm, sunny conditions good control can be expected.
			Weeds growing in shaded parts of the water body will take longer to be controlled

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		and may require additional applications.	
Sagittaria (S.platyphylla)	Apply 1 tablet for every 37.5 cubic metres of water to achieve 400 parts per billion (ppb)	For control of Sagittaria using direct tablet application, at least 50% of the weed biomass must be below the water.	
		In addition to direct tablet application, a surface spray to the exposed foliage as directed will improve the result.	
Salvinia (S.molesta)	Apply 1 tablet for every 37.5 cubic metres of water to achieve 400 parts per billion (ppb)	Salvinia plants can absorb the herbicide by root uptake from the water column, as well through the foliage from foliar applications.	
		Dense, established populations of <i>Salvinia</i> will benefit from a program treatment consisting of direct tablet application and surface sprays.	
		Use the direct tablet application method to reduce the weed density, then follow up with a surface spray as directed.	
Alligator weed (Alternanthera philoxeroides)	Apply 1 tablet for every 37.5 cubic metres of water to achieve 400 parts per billion (ppb)	Alligator weed plants can absorb the herbicide by leaf/stem uptake from the water column, as well through the foliage from foliar applications.	
		Dense, established populations of Alligator weed will benefit from a program treatment consisting of direct tablet application and surface sprays – particularly where the weed grows up onto the banks.	

B. Water bodies less than 0.5m deep, or with estimated water volume less than 37.5 m<sup>3</sup>, or with barriers to water circulation where direct tablet application is not practical.

SITUATION	Weeds Controlled	RATE	CRITICAL COMMENTS
Control of floating, emergent and submerged weeds where Direct tablet application is not practical	Alligator weed (Alternanthera philoxeroides) Amazon Frogbit (Limnobium laevigatum) Azolla (A.pinnata and A. filculoides) Blue Water Lily (Nymphaea spp) Blunt pondweed (Potamogeton ochreatus) Cabomba (C. caroliniana) Duckweed (Lemna spp) Floating filamentous algae (Cladophora spp, Spirogyra spp) Hornwort (Ceratophyllum demersum) Leafy Elodea (Egeria densa) Mexican Water lily (N.mexicana) Sagittaria (S.platyphylla) Salvinia (S. molesta) Slender knot or Smartweed (Persicaria decipiens) Water Lettuce (Pistia stratiotes) Water stargrass (Heteranthera zosterifolia) Yellow water poppy (Hydrocleys nymphoides)	Injection of Spray solution.  200 – 400 ppb (parts per billion) plus approved aquatic adjuvant/surfactant @ 0.5 -1% v/v	Calculate the number of tablets required to treat the water body at 200 ppb (1 tablet for every 75 cubic metres of water) OR 400 ppb (1 tablet for every 37.5 cubic metres of water).  Dissolve the tablets in a sufficient volume of water (at least 20L for every tablet) in a spray tank.  Agitate and mix thoroughly until the tablets are completely dissolved, then inject the total volume of spray solution into the water column to achieve uniform distribution of the herbicide.  Use this method of application when Direct tablet application will not give thorough distribution of the herbicide due to:  1. Too small water volume 2. Too shallow water body 3. Inadequate circulation or physical barriers that could restrict distribution of the herbicide to all areas of the water body.  Always use the higher rate for control of Leafy Elodea, Sagittaria, Salvinia and Alligator weed

NOT TO BE USED FOR ANY PURPOSE OR IN ANY MANNER CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

#### WITHHOLDING PERIODS

Between treatment and re-entering treated water: not required

Between treatment and using treated water for drinking by pets and livestock: not required

Between treatment and using treated water to irrigate pasture for grazing: 2 days

Between treatment and using treated water to irrigate couch or kikuyu turf and lawns: 2 days

For other turf species – contact your supplier

Between treatment and using treated water for recreational fishing: 3 days

Between treatment and using treated water, with pH greater than 6.8, to irrigate gardens and ornamentals: 7 days

Between treatment and using treated water, with pH greater than 6.8, to irrigate food crops: 14 days

Between treatment and using treated water for drinking by humans: 10 days

#### NOTE:

- 1. Water being held and then used for irrigation typically has pH higher than 6.8. If a lower pH occurs then consult your supplier before using.
- 2. Appropriate warning signs should be posted to limit use of treated water as per the above withholding periods.

#### **RESISTANT WEEDS WARNING**

GROUP 14 HERBICIDE

CLIPPER Herbicide is a member of the N-phenylphthalimides group of herbicides. The mode of action of CLIPPER Herbicide is to inhibit protoporphyrinogen oxidase. For weed resistance management, CLIPPER Herbicide is a Group 14 Herbicide. Some naturally-occurring weed biotypes resistant to CLIPPER Herbicide and other Group 14 Herbicides may exist through normal genetic variability in any weed population. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by CLIPPER Herbicide or other Group 14 Herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Sumitomo Chemical Australia Pty Ltd accepts no liability for any losses that may result from the failure of CLIPPER Herbicide to control resistant weeds. Strategies to minimize the risk of herbicide resistance are available. Contact your chemical supplier, consultant or local Department of Agriculture.

#### PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND THE ENVIRONMENT

Very toxic to aquatic life. However, the use of this product as directed is not expected to have long-term adverse impacts on native species in the treatment area. DO NOT contaminate wetlands or watercourses with this product or used containers outside the treatment area. Refer to label directions to minimise the entry of herbicide into unintended areas..

#### STORAGE AND DISPOSAL

Store in a locked room or place away from children, animals, food, feedstuffs and fertilizers. Store in the closed, original container in a dry, cool well-ventilated area out of direct sunlight.

DO NOT store in or expose product to wet conditions. Rough handling of product may cause breakage of water soluble wrapping.

DO NOT dispose of undiluted chemicals on-site. Use an approved waste management facility or designated landfill.

Break, crush or puncture packets and containers and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.

#### **SAFETY DIRECTIONS**

Poisonous if absorbed by skin contact or swallowed. May irritate the eyes and skin.

Avoid contact with eyes and skin. Open packets only as needed and never remove the water-soluble wrapping around the tablet.

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When opening the container and using the product, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length chemical resistant gloves. In addition, when preparing spray and using the prepared spray wear goggles.

After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use wash gloves, goggles, and contaminated clothing.

#### **PRECAUTIONS**

While using elbow long gloves, tear the bag open and throw the contained tablets wrapped in water soluble covering directly into a waterbody infested with aquatic weeds at appropriate spacing; or add the contained tablets wrapped in water soluble covering directly into the spray tank.

When dissolving in the spray tank, add individual tablets slowly, one at a time. USE ALL TABLETS.

Safety of treated water on gardens and ornamentals has not been tested and therefore, it is recommended that small areas of gardens or a small number of ornamental plants be tested for safety before largescale application occurs.

#### **FIRST AID**

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia Tel. 131126; New Zealand 0800 764 766.

<u>WARNING</u>: CONTAINS FLUMIOXAZIN WHICH CAUSES BIRTH DEFECTS IN LABORATORY ANIMALS. WOMEN OF CHILD BEARING AGE SHOULD AVOID CONTACT WITH FLUMIOXAZIN

#### **SAFETY DATA SHEET**

Additional information is listed in the Safety Data Sheet (SDS) obtained from Sumitomo Chemical Australia Pty Ltd.

#### **IMPORTANT NOTICE**

These goods are to be used only for the purpose and as specified on the label, and are not suitable for any other purpose. To the fullest extent permitted by law, we do not accept or bear any liability on any basis for any loss, damage, cost or expense, arising in any way, directly or indirectly, in connection with the goods.

#### APVMA Approval No:

Batch No:

**DIAL: 000** 

Date of Manufacture:

POLICE OR FIRE BRIGADE

	DERED TO BE A DANGEROUS GOOD UNDER THE RANSPORT OF DANGEROUS GOODS BY ROAD AND			
RAIL				
IN A TRANSPORT EMERGENCY	FOR SPECIALIST ADVICE IN AN EMERGENCY ONLY			

PHONE: 1800 024 973

TOLL FREE - ALL HOURS - AUSTRALIA WIDE

Clipper is the registered trademark of Sumitomo Chemical Company, Japan.

Bonus is the registered trademark of Nufarm Australia Limited

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