GROUP 22 HERBICIDE

REWARD[®]

Aquatic Herbicide

Solution

RESTRICTED

For control of weeds in still or slow-moving water of farm dugouts, farm ponds, industrial ponds, farm ditches, lakes, streams and canals, and for weed control in non-crop land (rights-of-way for transportation or utility corridors, airports, wasteland, garbage dumps and industrial parks).

ACTIVE INGREDIENT:

READ THE LABEL AND BOOKLET BEFORE USING KEEP OUT OF REACH OF CHILDREN





REGISTRATION NO. 26271 PEST CONTROL PRODUCTS ACT

NET CONTENT: 1 L - 5 L

Syngenta Canada Inc.

140 Research Lane, Research Park Guelph, Ontario N1G 4Z3 Telephone: 1-877-964-3682

Label

WARNING! *HARMFUL OR FATAL IF SWALLOWED. *CAUSES SUBSTANTIAL EYE INJURY AND SKIN IRRITATION. PROTECTIVE EYEWEAR AND CLOTHING ARE REQUIRED. *DO NOT GET IN EYES, ON SKIN OR ON CLOTHING. HARMFUL IF INHALED, AVOID INHALING/BREATHING DUST, SPRAYS, ETC. *NEVER TRANSFER TO OTHER CONTAINERS. * KEEP OUT OF REACH OF CHILDREN AND ANIMALS. FULL DETAILS OF THESE HAZARDS ARE IN LABEL BELOW.

NOTICE TO USER

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

FIRST AID

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

If swallowed, call a poison control centre or doctor **IMMEDIATELY** for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

If in eyes, IMMEDIATELY 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 centre or doctor for treatment advice.

If on skin or clothing, take off contaminated clothing. Rinse skin **IMMEDIATELY** with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

If inhaled, move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

TOXICOLOGICAL INFORMATION

To be effective, treatment for ingestion of the product must begin IMMEDIATELY. If swallowed, give adsorbent suspension, for example either activated charcoal (100 g for adults or 2 g/kg body weight for children) or bentonite clay (100 to 150 g for adults or 2 g/kg body weight for children), mixed with a purgative (MgSO4, Na2SO4 or mannitol). Maintain and monitor electrolyte and fluid status daily. Consider haemodialysis or haemoperfusion using charcoal column.

If in eyes, treat symptomatically, using antibiotics and steroids as necessary. Symptoms may develop gradually. Severe damage may be caused by apparently trivial contact and healing may be delayed. Medical supervision should continue until complete healing has occurred.

The use of supplemental oxygen is contraindicated. Do not administer supplemental oxygen unless

the patient develops severe hypoxemia.

PRECAUTIONS

EXCESSIVE EXPOSURE TO DIQUAT MAY CAUSE A HEALTH HAZARD. FOLLOWING THE DIRECTIONS AND PRECAUTIONS WILL REDUCE EXPOSURE.

DO NOT get on skin or clothing. DO NOT get in eyes. Wear chemical resistant coveralls over a long-sleeved shirt and long pants, chemical-resistant gloves, protective eyewear, socks, chemical resistant footwear, and a respirator during mixing, loading and application, clean-up and repair. Chemical-resistant headgear must be worn for overhead applications. Most exposure to pesticides is by absorption through skin, especially from concentrated material handled at the time of mixing and loading. Rolling down the sleeve end of the glove will prevent drips of liquid from running down the glove onto your arm.

Users should remove personal protective equipment immediately after handling this product. Wash the outside of the gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

REMOVE CONTAMINATED CLOTHING IMMEDIATELY. Launder contaminated clothing prior to reuse and separate from household laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

Do not eat, drink, handle or use tobacco, or apply cosmetics in areas where there is potential for exposure to this product. Users should wash hands and face before eating, drinking, chewing gum, handling tobacco or using the toilet. Store and wash all protective clothing separately from household laundry.

Do not contaminate food, feed, domestic or irrigation water supplies, lakes, streams and ponds.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval of 12 hours.

STORE IN ORIGINAL CONTAINER tightly closed in a safe place away from children.

If this pest control product is to be used on a commodity that may be exported to other countries in the world and you require information on acceptable residue levels in these countries, please contact Syngenta Canada Inc. at 1-87-SYNGENTA / 1-877-964-3682.

ENVIRONMENTAL PRECAUTIONS

TOXIC to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

STORAGE

Store in original container, tightly closed, in a safe place away from children.

Store above 0 °C. If crystallization occurs because of storage below this, warm to room temperature and agitate gently until reconstituted.

DISPOSAL

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean up of spills.

FOR DISPOSAL OF PLASTIC JUGS:

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING, CALL 1-800-327-8633 (FASTMED)

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ACTIVE INGREDIENT:



WARNING

POISON

CAUTION – EYE AND SKIN IRRITANT

REGISTRATION NO. 26271 PEST CONTROL PRODUCTS ACT

Syngenta Canada Inc.

140 Research Lane, Research Park Guelph, Ontario N1G 4Z3 Telephone: 1-877-964-3682

Pamphlet

WARNING!

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NOTICE TO USER

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NATURE OF RESTRICTION: This product is to be used only in the manner authorized, consult local pesticide regulatory authorities about use permits which may be required.

The restricted uses of REWARD[®] Aquatic Herbicide may be subject to other legislative requirements such as those under the Fisheries Act.

RESTRICTED USES

For the control of water weeds such as Coontail (*Ceratophyllum* spp.), Duckweed (*Lemna* spp.), Canada Water Weed (*Elodea, Anacharis* spp.), Pondweeds (*Potamogeton* spp. except Richardson's Pondweed (*P.richardsonni*)), Water Milfoil (*Myriophyllum* spp.), Water Soldier (*Stratiotes aloides*), Water Chestnut (*Trapa natans* L.), and Flowering Rush (*Butomus umbellatus*) in still or slow flowing water of farm dugouts, farm ponds, industrial ponds, farm ditches, lakes, streams and canals, apply REWARD® Aquatic Herbicide at 18.3 L/ha (1 ha = 10,000 m² or 100 m x 100 m). 2.3 litres of REWARD Aquatic Herbicide will treat a farm dugout 25 m x 50 m. Milfoil may be controlled at 9.2 L/ha in the early stages of growth. For the control of growing weeds in 1.5 m of water or less, use 18.3 L/ha of REWARD Aquatic Herbicide. For the control of growing weeds in more than 1.5 m of water, apply 25-29.2 L/ha of REWARD Aquatic Herbicide.

Algae: *Cladophora, Spirogyra*, and *Pithophora* spp. will be temporarily controlled at the above rates. Repeat treatments may be required for full season control of these species. REWARD Aquatic Herbicide will not control Stonewort, Muskgrass (*Chara* spp.). REWARD Aquatic Herbicide, after suitable dilution with clean water, may be injected below the water surface, sprayed over the water surface or poured directly onto the surface while moving over the surface in a boat, or may be applied from the banks of small bodies of water.

To inject below the water surface, a suction type of boat bailer is mounted on the cavitation plate of an outboard motor and the end of the inlet tube inserted into a solution containing 1 part REWARD Aquatic Herbicide diluted with at least 10 parts of clean water. Make lines of travel at regular intervals through the water (3 m or less apart) over the area to be treated until the whole area has received a uniform application.

For Surface application, dilute 1 part REWARD Aquatic Herbicide with at least 4 parts clean

water and spray over water surface, pour directly onto water surface or apply from the banks of small bodies of water.

Timing of Application: Apply only after weeds are visible and in an active stage of growth which is normally sometime in late May through June as growth is dependent on water temperatures. Application should be made to actively growing weeds before they become so thick that they make application difficult. Application to dense growth of mature weeds will not give satisfactory control.

Repeat treatments may be required if weed growth reappears. Repeat application of diquat to water bodies is prohibited for two weeks after application in order to protect aquatic organisms. For temporary control of water weeds growing above the surface of the water, such as waterlilies, uniformly spray with REWARD Aquatic Herbicide at 9.2 to 26.7 L in 1700 to 2200 L of water per hectare to thoroughly wet the foliage. Use AGRAL[®] 90 at 1 L per 1000 L of water.

LIMITATIONS

In some provinces of Canada permits are required before chemicals such as REWARD Aquatic Herbicide can be added to water. Consult local authorities before applying REWARD Aquatic Herbicide to ascertain whether such a permit is required in your area. Do not use treated water for at least 24 hours after treatment for swimming and animal consumption. For human consumption and irrigation do not use for at least 5 days after treatment. To protect the fish in small lakes, streams and ponds with a dense weed growth, treat not more than 1/4 to 1/3 of the area at one time, otherwise the dying weeds over a large area will cause a serious loss of oxygen which may injure or kill the fish. Do not apply to muddy water and do not agitate water excessively during 1 or 2 days after treatment or the effectiveness of the chemical will be reduced. Use clean water for diluting the chemical.

Do not use wetting agents for water treatment, except as specified. Avoid application or drift onto crops, ornamental plants, lawns, grazing areas or other desirable growth. Do not apply through mist blowers.

It is important to thoroughly wash equipment after spraying - use a detergent or wetting agent (AGRAL 90 at 60 mL per 100 L of water), flush and spray out, then thoroughly rinse with clean water. When possible, the equipment should be filled with clean water and left overnight. Spray out before storing equipment or using for other materials.

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PRODUCT INFORMATION

REWARD Aquatic Herbicide is a non-volatile fast acting herbicide for the control of water weeds and when used as directed, presents no hazard to fish, other aquatic life or animals and humans making use of the treated water within the limitations prescribed. Control of susceptible weeds generally occurs within 1 to 2 weeks.

REWARD Aquatic Herbicide is inactivated upon contact with soil, mud or lake bottoms. Therefore, it has no residual herbicidal effect.

DIRECTIONS FOR USE

This product may be tank mixed with a fertilizer, a supplement, or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact Syngenta Canada Inc. at 1-87-SYNGENTA (1-877-964-3682) for information before applying any tank mix that is not specifically recommended on this label.

Syngenta Canada Inc. has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) of all potential tank-mixes under all environmental conditions or for all crop varieties. Tank mixes that are not specifically listed on this label should be tested on a small area first, under local conditions and using standard practices, to confirm the tank mix is suitable for widespread application.

To determine the physical compatibility of this product with other products, use a jar test.

Always read and follow label directions including WALES mixing order.

Weed Control in Non-Crop Land (rights-of-way for transportation or utility corridors, airports, wasteland, garbage dumps and industrial parks) - Apply 2.3 to 4.5 litres in a minimum of 225 litres of water per hectare. Use the higher rate and higher water volumes for dense weed growth. Maximum solution strength should not exceed 200 mL REWARD Aquatic Herbicide in 10 litres water. Thoroughly wet all foliage. Avoid spray mist contacting the foliage or green bark of desirable plants.

REWARD Aquatic Herbicide will provide a rapid top-kill of weeds and grasses when applied as a foliar spray. REWARD Aquatic Herbicide may be added to tank mixes of certain soil sterilants where immediate top-kill and long term soil sterilization is required. The combined use with soil sterilants should be based on previous experimental experience, and recommendations on the label of the residual herbicide.

Apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools and parks is minimal. Take into consideration meteorological conditions (e.g. wind speed, wind direction, temperature inversion) and application equipment and sprayer settings used for application.

Field sprayer application: DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) medium classification. Boom height must be 60 cm of less above the crop or ground.

DO NOT apply by air.

For terrestrial application to rights-of-way, buffer zones for protection of sensitive terrestrial habitats are not required; however, the best available application strategies which minimize off-site drift, including meteorological conditions (e.g. wind direction, low wind speed) and spray equipment (e.g. coarse droplet sizes, minimizing height above canopy), should be used. Applicators must, however,

observe the specified buffer zones for protection of sensitive aquatic habitats.

Buffer Zones

Use of the following spray methods or equipment DO NOT require a buffer zone: hand-help or backpack sprayer and spot treatment.

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, streams, reservoirs and wetlands) and estuarine/marine habitats.

Method of	Method of Use Site Buffer Zones (metres) Required for the			he Protection of:
Application		Aquatic Habitat of Depths:		Terrestrial
		Less than 1 m	Greater than 1 m	Habitat
Field sprayer ¹	Non-cropland (including rights-of- way ²)	10	5	5

¹ For field sprayer application, buffer zones can be reduced with the use of drift-reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy, the labelled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy, the labelled buffer zone can be reduced by 30%.

² For application to rights-of-way, buffer zones for protection of sensitive terrestrial habitats are not required.

When tank mixes are permitted, consult the labels of the tank-mix partners and observe the largest (most restrictive) spray buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, REWARD Aquatic Herbicide is a Group 22 herbicide. Any weed population may contain or develop plants naturally resistant to REWARD Aquatic Herbicide and other Group 22 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance:

Where possible, rotate the use of REWARD Aquatic Herbicide or other Group 22 herbicides within a growing season (sequence) or among growing seasons with different herbicide groups that control the same weeds in a field.

Use tank mixtures with herbicides from a different group when such use is permitted. To delay resistance, the less resistance-prone partner should control the target weed(s) as effectively as the more resistance-prone partner.

Herbicide use should be based on an integrated weed management program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical control methods), cultural (for example, higher crop seeding rates; precision fertilizer application method and timing to favour the crop and not the weeds), biological (weed-competitive

crops or varieties) and other management practices.

Monitor weed populations after herbicide application for signs of resistance development (for example, only one weed species on the herbicide label not controlled). If resistance is suspected, prevent weed seed production in the affected area if possible by an alternative herbicide from a different group. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.

Have suspected resistant weed seeds tested by a qualified laboratory to confirm resistance and identify alternative herbicide options.

Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.

For further information or to report suspected resistance, contact company representatives at 1-87-SYNGENTA (1-877-964-3682) or at <u>www.syngenta.ca</u>

AGRAL® and REWARD® are trademarks of a Syngenta Group Company.