## SOLERA DIQUAT 2L DESICCANT

Solera Diquat 2L Desiccant contains diquat dibromide, the active ingredient used in Reglone<sup>R</sup>.

TO PREVENT ACCIDENTAL POISONING, NEVER PUT INTO FOOD, DRINK, OR OTHER CONTAINERS AND USE STRICTLY IN ACCORDANCE WITH ENTIRE LABEL. DO NOT USE THIS PRODUCT FOR REFORMULATION.

#### **ACTIVE INGREDIENT**

Contains 2.0 lbs. diquat cation per gal as 3.73 lbs. salt per gallon.

# KEEP OUT OF REACH OF CHILDREN WARNING AVISO

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

#### FIRST AID

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.
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
IF SWALLOWED	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> </ul>
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>
	<ul> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> </ul>
	<ul> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
IF IN EYES	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> </ul>
	<ul> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>
	Call a poison control center or doctor for treatment advice.
IF ON SKIN OR	Take off contaminated clothing.
CLOTHING	Rinse skin immediately with plenty of water for 15-20 minutes.
A	Call a poison control center or doctor for treatment advice.

For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

#### **NOTE TO PHYSICIAN**

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



#### Manufactured for:

Solera ATO, LLC 7364 E. Red Hawk St. Mesa, Az. 85207

EPA Registration No: 82542-15-84237 EPA Est. No:. Net Contents: DQT-03-R0509

#### PRECAUTIONARY STATEMENTS

## HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

May be fatal if swallowed. Harmful if absorbed through skin. Harmful if inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wear long-sleeved shirt and long pants, socks, shoes and chemical-resistant gloves (such as Natural Rubber, Selection Category A. (Wear protective eyeware.)\* Child Resistant Packaging is required due to residential uses on the label and Toxicity Category II for the oral route of exposure.

\*[Protective eyeware may be specified, if appropriate.]

#### PERSONAL PROTECTIVE EQUIPMENT

Some of the materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

#### **Applicators and Other Handlers Must Wear:**

- Coveralls over long-sleeved shirt and long pants.
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride.
- Chemical-resistant footwear plus socks.
- Protective eyewear.
- Chemical-resistant headgear for overhead exposure.
- Chemical-resistant apron when cleaning equipment, mixing, or loading.

#### **User Safety Requirement**

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### ENGINEERING CONTROLS STATEMENT

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS. Mixers, loaders, and applicators using closed systems who meet these requirements may wear: long-sleeved shirt and long pants; protective eyewear; waterproof gloves; shoes plus socks; and a chemical-resistant apron when mixing, loading, or cleaning equipment. If handling tasks are performed from inside an enclosed cab or aircraft with enclosed cockpits that meet these requirements may wear: long-sleeved shirt, long pants, shoes, and socks for the labeling-specified PPE. All labeling-specified PPE must be immediately available for use in an emergency. All applicable requirements as specified in 40 CFR 170.240(d)(4-6) must be followed.

#### USER SAFETY RECOMMENDATIONS

#### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### ENVIRONMENTAL HAZARDS

This pesticide is toxic to aquatic invertebrates.

**For Terrestrial Uses**, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters.

#### **DIRECTIONS FOR USE**

It is a violation of federal law to use this product in a manner inconsistent with its labeling. 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.

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls over long-sleeved shirt and long pants.
- · Chemical-resistant gloves.
- Chemical-resistant footwear plus socks.
- Protective eyewear.
- Chemical-resistant headgear for overhead exposure.

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides {40 CFR Part 170}. The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep all unprotected persons out of operating areas or vicinity where here may be drift.

Do not allow people or pets to touch treated plants until the sprays have dried.

For terrestrial uses, do not enter or allow entry of maintenance workers into treated areas, or allow contact with treated vegetation wet with spray, dew, or rain, without appropriate protective clothing until spray has dried.

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Do not contaminate feed, foodstuffs, or drinking water. Do not store or transport near feed or food. Store at temperatures above 32°F.

**PESTICIDE DISPOSAL:** Open dumping is prohibited. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ½ 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.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!.

#### GENERAL INFORMATION

Solera Diquat 2L Desiccant is a nonvolatile herbicide for use as a preharvest aid to desiccate certain crops in order to facilitate harvesting. Solera Diquat 2L Desiccant is also recommended for use as a general herbicide to control weeds in noncrop areas and nonbearing crops. Solera Diquat 2L Desiccant is a contact-type herbicide and requires actively growing green plant tissue to function. Thorough coverage of all green plant tissue is essential for effective control. Solera Diquat 2L Desiccant is rapidly absorbed by green plant tissue and interacts with the phytosynthetic process to produce compounds which destroy plant cells. Herbicidal activity is usually quite rapid with effects visible in a few days.

### AGRICULTURAL USE DIRECTIONS

#### APPLICATION

Since Solera Diquat 2L Desiccant is a contact-type herbicide, it is essential to obtain complete coverage of the target weed or crop to achieve effective results. Improper application technique and/or application to large, stressed, or mowed weeds will generally result in unacceptable control. Complete coverage is also essential for effective performance in harvest aid applications. See details below for additional information.

#### Nozzle Selection

The use of flat fan nozzles will result in the most effective application of Solera Diquat 2L Desiccant. The use of nozzles other than flat fans may result in reduced performance due to inadequate coverage.

#### **Spray Volume**

Follow recommended minimum spray volumes listed for each use of Solera Diquat 2L Desiccant. These are **minimum** volumes only, and spray volumes should be increased as necessary to obtain complete coverage of the target weed or plant without runoff from the foliage. When spraying less than 20 gals. of spray carrier per acre, target weeds should not exceed 6 inches in height.

#### SPRAY ADJUVANTS

#### Always Add One of the Following:

#### **Nonionic Surfactant (NIS)**

Add a NIS containing 75% or greater surface active agent at 0.06-0.5% v/v (1/2-4 pts. per 100 gals.) of the finished spray volume.

#### Other Adjuvants

Adjuvants other than NIS may be used providing the product meets the following criteria:

- Contains only EPA exempt ingredients.
- Is compatible in mixture. Compatibility may be established through a jar test.
- Is supported locally for use with Solera Diquat 2L Desiccant through proven field trials and through university and extension recommendations.

#### RATES

Follow recommended rates listed with each use of Solera Diquat 2L Desiccant. Use the higher label rates when weeds are large or dense. Also, use higher labeled rates for harvest aid when crop vegetation is dense.

#### APPLICATION TIMING

Solera Diquat 2L Desiccant should be applied to emerged weeds when they are small. Weeds 1 inch to 6 inches in height are the easiest to control. When weeds have been grazed or mowed, thus removing much of the green foliage, allow the weeds to regrow to a height of 2-4 inches before spraying. For proper application timing of harvest aid applications, refer to each crop for recommendations.

Weeds emerging after application of Solera Diquat 2L Desiccant will not be controlled or suppressed.

#### RAINFASTNESS

Because Solera Diquat 2L Desiccant is rapidly absorbed by green plant tissue, rain occurring 30 minutes after application will have no effect on the activity of Solera Diquat 2L Desiccant.

#### **ENVIRONMENTAL CONDITIONS**

Solera Diquat 2L Desiccant is active over a wide range of environmental conditions. Cool weather (below 55°F) will slow the activity of Solera Diquat 2L Desiccant, as will cloudy, overcast weather, but will not affect performance. In dry areas, dust stirred up by high winds or equipment tires can coat target surface and reduce Solera Diquat 2L Desiccant activity. Avoid applying Solera Diquat 2L Desiccant in extremely dusty conditions.

#### SPRAY DRIFT MANAGEMENT

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER. The interaction of many equipment-and-weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all there factors hen making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications suing dry formulations:

- The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
- Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45 degrees.

Where states have more stringent regulations, they must be observed.

#### DROPLET SIZE:

The most effective ay to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions sections of the label).

#### **CONTROLLING DROPLET SIZE:**

**Volume** – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

**Pressure** – Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

Number of Nozzles – Use the minimum number of nozzles that provide uniform coverage.

**Nozzle Orientation** – Orienting nozzles so that the spray is released parallel to the air stream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce the droplet size and increase drift potential.

**Nozzle Type** – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spay angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

#### **BOOM LENGTH:**

For some use patterns, reducing the effective boom length to less than <sup>3</sup>/<sub>4</sub> of the wingspan or rotor length may further reduce drift without reducing swath width.

#### **APPLICATON HIEGHT:**

Applications should not be made a a height greater than 10 feed above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

#### SWATH ADJUSTMENT:

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downside edges for the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller droplets, etc.).

#### WIND:

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

#### TEMPERATURE AND HUMIDITY:

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

#### TEMPERATURE INVERSIONS:

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small-suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates, indicates good vertical air mixing.

#### **SENSITIVE AREAS:**

The pesticide should only be applied when the wind is blowing away from adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops).

#### SPECIFIC USE INSTRUCTIONS

The following table indicates use pattern, rates, minimum spray volumes, and preharvest interval for specific uses.

Crop	Use Pattern	Rate Per Acre	Minimum Total Spray	Preharvest Interval	Precautions, Restrictions and Comments
		Acie	Volume Per Acre	(Days)	Comments
Alfalfa (seed crop only)	Preharvest desiccation broadcast	1 1/2-2 pts. (see precautions section for additional rate information)	Ground: 15 gal.  Air: 5 gal.	3	<ul> <li>On this stands of seed alfalfa use 1 pt per acre.</li> <li>Desiccation is complete in 3-10 days.</li> <li>Do not graze or feed treated forage to livestock.</li> <li>Do not use seed from treated plants for food, feed or oil purposes.</li> </ul>
Clover (seed crop only)	Preharvest desiccation broadcast	1 1/2 -2 pts.	Ground: 15 gal.  Air: 5 gal.	3	<ul> <li>Desiccation is complete in 3-10 days.</li> <li>Do not graze or feed treated forage to livestock.</li> <li>Do not use seed from treated plants for food, feed or oil purposes.</li> </ul>
Potato	Preharvest desiccation broadcast	1 -2 pts.	Ground: 20 gal. Air: 5 gal.	7	Do not apply to drought stressed potatoes.     Make a second application if necessary to obtain additional desiccation where vine growth is dense. For improved vine coverage, a 5 day interval is recommended between applications.     Do not exceed a total of 4 pts. per acre.
Sorghum, Grain (seed crop only)	Preharvest desiccation broadcast	1 1/2 -2 pts	Ground: 15 gal.  Air: 5 gal.	-	<ul> <li>Apply within 1-2 weeks of harvest and when seeds have not more than 30% moisture.</li> <li>Do not graze or feed treated forage to livestock.</li> <li>Do not use seed from treated plants for food, feed or oil purposes.</li> </ul>
Soybean (seed crop only)	Preharvest desiccation broadcast	1 1/2 -2 pts	Ground: 15 gal.  Air: 5 gal.	-	<ul> <li>Apply one week before harvest.</li> <li>Do not graze or feed treated forage to livestock.</li> <li>Do not use seed from treated plants for food, feed or oil purposes.</li> </ul>
Tree, Vine, Small Fruit, Vegetable Crops- Nonbearing Acerola (West Indian Cherry) Almonds Apple Apricots Artichokes Asparagus Avocados Bananas Blackberry Blueberry	Directed Spray	1 1/2 -2 pts	Ground: 15 gal.	Do not use for food or feed for one year after application.	Solera Diquat 2L desiccant can be used during site preparation prior to planting and up to 1 year of harvest.     Retreatment may be necessary for complete control of grasses and older established weeds.     Do not allow spray to contact green stems, foliage, or fruit as injury can occur.     Use a shield or wrap plant when spraying around young trees or vines.     Do not graze treated areas.

Boysenberry Cherries Coffee Conifers Crabapple Cranberry Dates Dewberry Eliderberry Figs Filberts Ginseng Gooseberry Grapes Grapeffuit Guava Huckleberry Jojoba Kiwi Lemons Limes Loganberry Macadamia Mango Nectarines Olives Oranges Papayas Passion Fruit Peaches Pears Pecans Persimmons Pistachios Plantains Plums Plums Pomegranate Prunes Raspberry Tangelos Tangerines Walnuts	Coffee Conifers Crabapple Cranberry Dates Dewberry Elderberry Figs Filberts Ginseng Gooseberry Grapes Grapefruit Guava Huckleberry Jojoba Kiwi Lemons Limes Loganberry Macadamia Mango Nectarines Olives Oranges Papayas Passion Fruit Peaches Pears Pears Pears Pears Pears Pears Pears Pears Pears Persimmons Pistachios Plantains Plums Pomegranate Prunes Raspberry Iangelos Tangerines	
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The following table indicates use pattern and rates for noncrop or nonplanted areas.						
Other Uses	Use Pattern	Rate	Recommendations, Precautions, and			
			Restrictions			
Noncrop or Nonplanted Areas on Farms  Fence Lines, Farmyards, Farm Buildings, Fuel Storage Areas, Barrier Strips, Equipment Areas, and Dry (non- flooded) Areas around ponds, lakes, and drainage ditches on farms	Broadcast  Spot Treatment	1-2 qts. plus the labeled rate of 75% or greater nonionic surfactant per 100 gals. water or 0.75 oz. (22ml) or greater nonionic surfactant per 1 gal. of	<ul> <li>Apply for full coverage and thorough weed contact.</li> <li>Retreatment may be necessary to control grasses and established weeds.</li> <li>Avoid spray contact with foliage of food crops or ornamental plants or other desirable vegetation.</li> <li>Add the labeled rate of 75% or greater nonionic surfactant to the finished spray volume.</li> </ul>			
		water.				

LIMITATIONS AND PRECAUTIONS (TERRESTRIAL USES)

Direct spray contact or drift of Solera Diquat 2L Desiccant will cause severe plant injury or death.

Avoid contact of desirable vegetation.

Weeds emerging after application of Solera Diquat 2L Desiccant will not be controlled or suppressed.

Retreatment may be necessary to control large weeds or established weeds.

Use of dirty or muddy water for Solera Diquat 2L Desiccant dilution may result in reduced control. Do not apply this product through any type of irrigation system.

Rinse all spray equipment thoroughly with water after use.

#### IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and should be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Solera ATO, LLC. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** SOLERA ATO LLC MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Solera ATO LLC is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein.

SOLERA ATO LLC DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT SOLERA ATO LLC'S ELECTION, THE REPLACEMENT OF PRODUCT.