

82542-28

12/23/2010

1/9



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

Mr. Robert Hawk
Source Dynamics LLC
10039 E. Troon North Drive
Scottsdale, AZ 85262

DEC 23 2010

Subject: Label Amendment – Revise signal word from Warning to Caution and associated precautionary language
Product Name: Solera IVM Herbicide
EPA Registration Number: 82542-28
Decision Number: 438197

The label amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable provided that you make the following changes to the product labeling:

1. Per the Diquat dibromide RED, revise the PPE section to read as follows:

“PERSONAL PROTECTIVE EQUIPMENT (PPE)

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
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing, or loading
- A dust/mist filtering respirator (MSHA/ NIOSH approval number prefix TC-21C)”

- * Note that the most conservative language between the active ingredient RED requirements and the product specific acute toxicity profile must be found on the label. In this case, the Diquat RED language is the most conservative.

2. As this ‘occupational use’ label does not include WPS uses, a ‘Non-Agricultural Use Requirements’ box is not appropriate. Per the Diquat dibromide RED, replace this box with the following:

“Entry Restriction

For 4 days following applications to non-crop areas, do not allow employees to have contact with the treated plants, except for contact with their footwear.”

Continued on Page 2

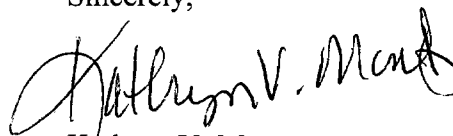
Page 2 of 2
EPA Reg. No. 82542-28
Label Amendment
D# 438197

3. Revise "recommended" with "specified" in the 'Rates' section text. In addition, remove "Recommendations" from the top of column 4 in the rate table on page 6 of 7.
4. Revise the "NON-CROP USE SITES:" paragraph to read as follows:
"Solera IVM may be used for annual weed control in the following areas:
airports; highway and road sides; railroad beds; pipeline and utility right-of-ways;
farmyards; fuel storage areas; outdoor equipment areas; fence rows; soil banks;
barrier strips; and lumber yards."

Also revise the table on page 6 to match these use sites.
5. Include the following restriction text:
"Applications to non-cropland areas are not applicable to treatment of commercial
timber or other plants being grown for sale or other commercial use, or for
commercial seed production, or for research purposes."

One copy of the label stamped "Accepted with Comments" is enclosed for your records. Products shipped after 18 months from the date on this notice or the next printing of the label whichever occurs first, must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA. Your release for shipment of this product constitutes acceptance of these conditions. This label supersedes all previous accepted labels. You must submit one copy of the final printed label before the product is released for shipment.

Sincerely,



Kathryn V. Montague
Product Manager (23)
Herbicide Branch
Registration Division (7505P)

Diquat Dibromide IVM draft label August 2, 2010

SOLERA IVM HERBICIDE

Solera IVM Herbicide contains the active ingredient diquat dibromide.

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

Diquat dibromide [6,7-dihydrodipyrido(1,2-a:2',1'-c)pyrazinediium dibromide].....37.3%

OTHER INGREDIENTS:.....62.7%

TOTAL 100%

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

**ACCEPTED
with COMMENTS
In EPA Letter Dated:**

DEC 23 2010

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

KEEP OUT OF REACH OF CHILDREN CAUTION

82542-28

FIRST AID

IF INHALED	<ul style="list-style-type: none"> • 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 center or doctor for further treatment advice.
IF SWALLOWED	<ul style="list-style-type: none"> • Call a poison control center 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 center or doctor. • Do not give anything by mouth to an unconscious person.
IF IN EYES	<ul style="list-style-type: none"> • 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.

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:
Source Dynamics LLC
10039 E. Troon North Dr.
Scottsdale, AZ 85262

**EPA Registration No: 82542-28
EPA Est. No.:
Net Contents: 2.5 Gallons**

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION

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

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:

- Long-sleeved shirt and long pants.
- Socks.
- Shoes.
- Chemical-resistant gloves.

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 exist, 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 treated 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.

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 of vicinity where there may be drift.

Do not enter or allow others to enter treated areas until sprays have dried.

For terrestrial uses, do not 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.

NON-CROP USE SITES: Solera IVM Herbicide is recommended for general annual weed control on private, public and military lands such as uncultivated non-agricultural areas such as airports, highways, railroads and utility rights-of-way, sewage disposal areas; uncultivated agricultural areas; noncrop or nonplanted areas on farms such as around farm buildings, fuel storage areas, equipment areas, fence rows, soil banks, and barrier strips; and industrial sites such as lumber yards, pipeline and tank farms.

Combinations with other herbicides broaden the spectrum of weeds controlled. If long-term residual control is wanted, tank mix with an approved residual herbicide.

TANK MIXING

Solera IVM Herbicide does not provide residual weed control. For subsequent residual weed control, follow a label approved herbicide program. Use according to the most restrictive precautionary statements for each product in the mixture.

Product Information

Solera IVM herbicide can be used to control annual weeds and grasses in noncrop areas. Solera IVM herbicide 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 IVM Herbicide is rapidly absorbed by green plant tissue and interacts with the photosynthetic process to produce compounds which destroy plant cells. Herbicidal activity is usually quite rapid with effects visible in a few days.

Non Crop Applications

Since Solera IVM Herbicide 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. See details below for additional information.

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 IVM Herbicide. Use the higher label rates when weeds are large or dense.

APPLICATION TIMING

Solera IVM herbicide should be applied to emerged annual weeds when they are small. Weeds 1 inch

to 6 inches in height are the easiest to control. When weeds have been mowed, thus removing much of the green foliage, allow the weeds to regrow to a height of 2-4 inches before spraying. Weeds emerging after application of Solera IVM herbicide will not be controlled or suppressed. A residual herbicide may be used to extend length of control.

RAINFASTNESS

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

ENVIRONMENTAL CONDITIONS

Solera IVM herbicide is active over a wide range of environmental conditions. Cool weather (below 55°F) will slow the activity of Solera IVM herbicide, 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 IVM herbicide activity. Avoid applying Solera IVM herbicide in extremely dusty conditions.

SPRAY DRIFT MANAGEMENT

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR. 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 these factors when making decisions.

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

1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees. Where states have more stringent regulations, they should be observed.

INFORMATION ON DROPLET SIZE:

The most effective way 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 airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

Nozzle Type – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray 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 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

APPLICATION HEIGHT:

Applications should not be made at a height greater than 10 feet above the top of the target 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 downwind edges of 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 drops etc.)

WIND

Drift potential is lowest between wind speeds of 3 – 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 3 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).

The following table indicates use pattern and rates for noncrop areas.

Other Uses	Use Pattern	Rate	Recommendations, Precautions, and Restrictions
Railroad Beds, Switch Yards, Depots, Tank Farms, Fence Lines, Farmyards, Farm Buildings, Fuel Storage Areas, Barrier Strips, Equipment Areas, and Dry (non-flooded) Areas	Broadcast	1-2 pts. in a minimum of 15 gals. water per acre. Add the labeled rate of 75% or greater nonionic surfactant to the finished spray volume. Apply in sufficient water to obtain complete coverage of all green foliage. For weeds approaching 6 inches in height make sure use the maximum rate of 2 pints/acre.	Apply by ground application equipment only. Apply for full coverage and thorough weed contact. Retreatment may be necessary to control grasses and established weeds. Avoid spray contact with foliage of food crops or ornamental plants or other desirable vegetation.
	Spot Treatment	1-2 pts. 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 water.	

LIMITATIONS AND PRECAUTIONS (TERRESTRIAL USES)

Direct spray contact or drift of Solera IVM herbicide will cause severe plant injury or death. Avoid contact of desirable vegetation.

Weeds emerging after application of Solera IVM herbicide 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 IVM herbicide 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.

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:

Plastic containers of 5 gallons or less: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available.

Triple rinse or pressure rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Mini-bulk Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent 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.

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

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 must 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 Source Dynamics LLC. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, SOURCE DYNAMICS 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 Source Dynamics LLC is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, SOURCE DYNAMICS 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 SOURCE DYNAMICS LLC'S ELECTION, THE REPLACEMENT OF PRODUCT.