

2013-6108

2014-05-20

(Container Label)

Etho SC Herbicide  
Solution

FOR THE SELECTIVE CONTROL OF WEEDS IN SUGAR BEETS AND SOD FARMS

AGRICULTURAL

REGISTRATION NO. 28350  
PEST CONTROL PRODUCTS ACT

GUARANTEE: Ethofumesate 480 g/L

NET CONTENTS: 10 Litres



WARNING POISON  
CAUTION SKIN IRRITANT  
POTENTIAL SKIN SENSITIZER

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING.

United Phosphorus, Inc.  
630 Freedom Business Center, Suite 402  
King of Prussia, PA 19406, USA  
1-800-438-6071

Public Inquiries:  
United Phosphorus, Inc.  
3971 Chicory Court  
Mississauga, ON, L5C 3S8  
905-275-2525

For Chemical Emergency: spill, leak, fire, exposure or accident,  
call CHEMTREC 1-800-424-9300

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web site at [www.croplife.ca](http://www.croplife.ca).

**PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN.** Harmful if swallowed, inhaled or absorbed through skin. Avoid contact with skin, eyes or clothing. May irritate the skin. Potential skin sensitizer. May be fatal if inhaled. **DO NOT** inhale mist. Wash thoroughly with soap and water after handling. During mixing, loading, clean-up and repair activities, workers must wear long pants, long-sleeved shirts, shoes, socks and chemical resistant gloves.

Wear a long-sleeved shirt, long pants, shoes and socks during mixing, loading, application, clean-up and repair activities. In addition wear chemical-resistant gloves during mixing, loading, clean-up and repair activities.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

#### SOD FARMS

When using open cab groundboom equipment wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, shoes and socks during mixing, loading, application, clean-up and repair activities.

Do not treat more than 23 ha per day when using open cab groundboom application equipment

When using closed cab groundboom application equipment, wear chemical resistant coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, shoes and socks during mixing, loading, clean-up and repair activities. In addition, wear a long-sleeved shirt, long pants, shoes and socks during application.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 8 days for mowing, watering, and irrigation activities and 12 hours for all other activities.

**FIRST AID: 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 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. **IF IN EYES**, hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**TOXICOLOGICAL INFORMATION:** Etho SC Herbicide is not a cholinesterase inhibitor, there is no specific antidote. No effects of overexposure have been observed in humans. Treat symptomatically.

**ENVIRONMENTAL HAZARDS:** Keep out of lakes, ponds, rivers and streams. Do not contaminate water by cleaning of equipment or disposal of wastes. To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to, heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. soils that are compacted, fine textured, or low in organic matter such as clay). Avoid application of this product when heavy rain is forecast. **TOXIC** to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under **DIRECTIONS FOR USE**.

**STORAGE:** Store product in original container only. Do not store near foods, feeds, seeds or fertilizers. Avoid contamination of food. Store Etho SC Herbicide in a cool place above 0° C.

**DISPOSAL:** 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.

**Disposal of Unused, Unwanted Product:** 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 cleanup of spills.

#### **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. The user assumes the risk to persons or property that arises from any such use of this product.

(Booklet)

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## **GENERAL INFORMATION**

Etho SC Herbicide is a selective soil-applied herbicide for use in sugar beets for the control of the weed species listed below. It provides effective control of these weeds for up to 10 weeks following application.

Lady's thumb, Purslane, Shephard's-purse, Kochia, Barnyard Grass, Wild Oats, Volunteer Wheat, Common Lamb's-quarters, Redroot Pigweed, Pennsylvania Smartweed, Crabgrass, Foxtail, Volunteer Barley and Volunteer Oats.

Etho SC Herbicide will also reduce competition of these hard-to-control weed: Wild Buckwheat, Russian Thistle, and Black Nightshade.

## **GENERAL USE PRECAUTIONS**

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web site at [www.croplife.ca](http://www.croplife.ca).

Etho SC Herbicide should be used only for recommended purposes and at recommended rates (DO NOT OVERTREAT).

Etho SC Herbicide applied according to directions and under normal growing conditions will not injure Sugar beets, though it may cause early leaf fusion, distortion and stunting, particularly if the crop is under stress.

Do not store near foods, feeds, seeds or fertilizers.

Avoid contamination of food.

Store Etho SC Herbicide in a cool place above 0° C.

Do not mix Etho SC Herbicide with liquid fertilizers.

Do not allow spray mixture to stand in tank overnight. Flush and drain spray equipment after each day's use. Store unused spray mixture in tightly sealed metal containers and protect from frost.

### **STORAGE:**

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### **CONTAINER DISPOSAL:**

Do not reuse 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:

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During mixing, loading, clean-up and repair activities, workers must wear long pants, long-sleeved shirts, shoes, socks and chemical resistant gloves.

Wear a long-sleeved shirt, long pants, shoes and socks during mixing, loading, application, clean-up and repair activities. In addition wear chemical-resistant gloves during mixing, loading, clean-up and repair activities.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

## SOD FARMS

When using open cab groundboom equipment wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, shoes and socks during mixing, loading, application, clean-up and repair activities.

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**FIRST AID:**

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**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.

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**TOXICOLOGICAL INFORMATION:**

Etho SC Herbicide is not a cholinesterase inhibitor; there is no specific antidote. No effects of overexposure have been observed in humans. Treat symptomatically.

**ENVIRONMENTAL HAZARDS:**

Keep out of lakes, ponds, rivers and streams. Do not contaminate water by cleaning of equipment or disposal of wastes.

To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to, heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. soils that are compacted, fine textured, or low in organic matter such as clay).

Avoid application of this product when heavy rain is forecast.

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

**DIRECTIONS FOR USE:**

Read the entire Directions for Use before using this product.

**SHAKE CONTAINER WELL BEFORE USING.**

DO NOT apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, ditches and wetlands), estuaries or marine habitats. DO NOT contaminate irrigation or drinking water supplies

or aquatic habitats by cleaning of equipment or disposal of wastes.

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.

**Buffer Zones:**

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, rangelands, riparian areas and shrublands) and sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, ditches and wetlands).

| Method of Application | Buffer Zones (metres) Required for the Protection of: |          |                  |                     |
|-----------------------|-------------------------------------------------------|----------|------------------|---------------------|
|                       | Freshwater Habitat of Depths:                         |          |                  | Terrestrial Habitat |
|                       | Less than 1 m                                         | 1 to 3 m | Greater than 3 m |                     |
| Field sprayer         | 1                                                     | 0        | 0                | 2                   |

When a tank mixture is used, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.

**SOIL PREPARATION:** The soil should be prepared according to good agricultural practices. Large clods can reduce the effectiveness of Etho SC Herbicide. All existing vegetative growth should be thoroughly worked into the soil before treatment.

**SPRAY EQUIPMENT:** Apply Etho SC Herbicide to the soil using standard low pressure (150 -275 kPa) ground spray equipment. Spray equipment should be carefully calibrated before use and checked frequently during application to see that it is functioning properly.

Apply uniformly the recommended rate in 110-560 litres of water per hectare. Avoid overlaps since crop injury may result. Do not use smaller than 50-mesh strainer and never less than an 8002E nozzle orifice. A Tee Jet 8003E is a better choice for this purpose and is recommended for appropriate screen to orifice size relationship.

**MIXING DIRECTIONS:** When mixing Etho SC Herbicide in the spray tank with Pyramin, add Etho SC Herbicide first and agitate spray solution thoroughly.

**GENERAL APPLICATION:**

**GROUND APPLICATION, DO NOT APPLY BY AIR.**



**FALL LAYERING APPLICATION:** This method of application can be used when spring moisture is marginal, or where irrigation water is not available at planting time. Fall bedding utilizes the winter-accumulated moisture to enhance activation of the herbicide and to aid in germination of the Sugar beet crop.

Prepare the field (as for planting: plow, pack and float, etc.) in the fall before ground freezes. Apply Etho SC Herbicide in a band on the soil surface at the recommended rate indicated in the appropriate regional dose table. Be sure that the soil surface to be treated is free from trash and vegetation.

Cover the treated bands with soil and form beds or ridges using ditchers or discs. In the spring when the soil is sufficiently dry to be worked, deridge the beds down to within 1.0 to 2.5 cm of the treated layer using suitable equipment such as the Kirchner Bedder or Oregon Northslope Harrow. When deridging, maintain the original bedding guidance system by using a bull tongue chisel, slide guides or similar equipment. This will ensure that the planter will follow in the treated band. Plant Sugar beets in the deridged area when the soil conditions allow.

**SPRING APPLICATION:** Apply Etho SC Herbicide before or at planting time and incorporate into the soil to a depth of 2.5 to 5.0 cm. Deeper incorporation may reduce effectiveness.

**INCORPORATION EQUIPMENT:** Test results have shown hooded-power or ground-driven rotary tillers, rolling cultivators and harrows to be effective for incorporating Etho SC Herbicide into the soil. Do not apply Etho SC Herbicide through soil injector shanks.

**CULTURAL PRACTICES FOLLOWING APPLICATION:** When properly applied Etho SC Herbicide will provide up to 10 weeks' control of susceptible weed species. In-row cultivation and thinning practices will reduce the period of weed control; therefore, care should be exercised to minimize soil disturbance.

**DOSAGE CHART  
ETHO SC HERBICIDE**

| SOIL TEXTURE                                                                                | RATE OF ETHO SC HERBICIDE PER HECTARE |                                |
|---------------------------------------------------------------------------------------------|---------------------------------------|--------------------------------|
|                                                                                             | Broadcast                             | 18 cm band width*<br>55 cm row |
| <b>Light Soils:</b><br>Sands, Loamy Sands<br>And Sandy Loams                                | 3.2 to 4.5 litres                     | 1 to 1.6 litres                |
| <b>Medium Soils:</b><br>Silt and Clay Loams<br>Which contain less than<br>3% organic matter | 4.5 to 6.75 litres                    | 1.6 to 2.25 litres             |

**Heavy Soils:**

Clay Loam and Clays  
Including those which  
Contain more than 3%  
organic matter

6.75 to 8.25 litres

2.25 to 2.8 litres

\* For other band or row widths adjust the rate in proportion to the area actually being treated. Where a range of rates is given for a group of soils, use the higher rate on the heavier soils or those high in organic matter content.

**ETHO SC HERBICIDE PLUS PYRAMIN SC (Alberta Only):**

The mixture is applied pre-emergence to Sugar beets under sprinkler irrigation. Incorporate products by applying 1.25 cm of water within 7 days after application. Do not mechanically incorporate this tank mix as crop injury may result. Do not apply to soils with less than 2% organic matter as crop injury may result. Apply one application per year. Do not rotate with any crops other than Sugar beets for 12 months after application. Consult the Pyramin SC label for additional information and precautions.

**DOSAGE CHART****ETHO SC HERBICIDE + PYRAMIN SC TANK-MIX**

| SOIL TEXTURE | RATE OF ETHO SC<br>HERBICIDE PER<br>HECTARE* |                                  | RATE OF PYRAMIN SC<br>PER HECTARE** |                                  |
|--------------|----------------------------------------------|----------------------------------|-------------------------------------|----------------------------------|
|              | Broadcast                                    | 18 cm<br>band width<br>55 cm row | Broadcast                           | 18 cm<br>band width<br>55 cm row |

**Light Soils:**

Sands, Loamy Sands  
And Sandy Loams

Not recommended

**Medium Soils:**

Silt and Clay Loams  
Which contain less than  
3% organic matter

3.65 litres

1.20 litres

5.25 kg

1.73 kg

\* For other band or row widths adjust the rate in proportion to the area actually being treated.

\*\* Based on commercial formulation containing 430 g/L pyrazon. If other formulations used, adjust rate accordingly.

**PRECAUTIONS**

Do not rotate with any crops other than Sugar beets for 12 months after application. Thorough tillage, including moldboard plowing, should precede the planting of crops other than Sugar beets. Do not use Etho SC Herbicide on muck or peat soils.

If crop is lost due to climatic or soil conditions following application of Etho SC Herbicide, do not plant crops other than Sugar beets in Etho SC Herbicide treated land during the same season. If fields are replanted to Sugar beets, reseed into treated band. Do not retreat field with Etho SC Herbicide.

To reduce injury to rotational crops following a droughty Sugar beet season, Etho SC Herbicide should be applied only in a band and the field should be moldboard plowed after harvest.

Wheat and barley may be injured if planted following a droughty Sugar beet season.

**CAUTION:** Do not graze the treated crops or cut for hay.

**NOTE TO BUYER/USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR SPECIAL USE APPLICATIONS:**

The DIRECTIONS FOR USE for this product for the uses described below were developed by persons other than United Phosphorus Inc and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. United Phosphorus Inc itself makes no representation or warranty with respect to product performance (efficacy) and crop tolerance (phytotoxicity) of this product when used on the crops listed. Accordingly, the Buyer and User assume all liability arising, and agree to hold United Phosphorus Inc harmless from any claims based on efficacy or phytotoxicity in connection with these uses.

**USE ON SOD FARMS to Control Annual Bluegrass (Poa annua)**

Residual control of annual bluegrass is dependent upon soil moisture conditions and soil texture. The activity of Etho SC Herbicide in the soil is reduced as the soil texture becomes finer and soil organic matter content increases.

Apply 2.2 kg product (1.1 kg a.i.) in 110 to 560 litres of water per hectare. Apply to soil using low pressure ground spray equipment. Do not use smaller than 50-mesh strainer and never less than an 8002E nozzle orifice. In order to obtain consistent annual bluegrass control, two applications may be required, with the first application made prior to seeding and the second made 6 weeks after seeding.

Kentucky bluegrass, perennial ryegrass, and Italian ryegrass have been shown to be tolerant to Etho SC Herbicide. Other turfgrass species may vary in their tolerance to herbicides, including to Etho SC Herbicide. Since not all turfgrass species have been tested for tolerance to Etho SC Herbicide, first use of Etho SC Herbicide should be limited to a small area of each species to confirm their tolerance prior to adoption as a general field practice. Additionally, consult your seed supplier for information on the tolerance of specific species of turfgrass to Etho SC Herbicide.

## **RESISTANCE-MANAGEMENT RECOMMENDATIONS**

For resistance management, Etho SC Herbicide is a Group 16 herbicide. Any weed population may contain or develop plants naturally resistant to Etho SC Herbicide and other Group 16 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 Etho SC Herbicide or other Group 16 herbicides 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.
- Herbicide use should be based on an IPM program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical), cultural, biological and other chemical control practices.
- Monitor treated weed populations for resistance development.
- Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.
- 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 United Phosphorous, Inc. at 1-800-438-6071 or at [www.upi-usa.com](http://www.upi-usa.com).

## **NOTICE TO USER**

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