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| GROUP | 15 | HERBICIDE |
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UPI S-MET Herbicide

AGRICULTURAL

Emulsifiable Concentrate for Selective Weed Control

GUARANTEE:

S-Metolachlor* 960 g/L

* and R-enantiomer

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

REGISTRATION NO.: 32847

PEST CONTROL PRODUCTS ACT

NET CONTENTS: 1L to Bulk

United Phosphorus, Inc.
630 Freedom Business Center, Suite 402
King of Prussia, PA 19406, USA

1-800-438-6071

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.

FIRST AID

IN CASE OF POISONING, contact a physician or a poison control centre **IMMEDIATELY**. 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. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give **any** liquid to the person. Do not give anything by mouth to an unconscious person.

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.

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.

NOTE: This product may cause skin sensitization reactions in certain individuals.

TOXICOLOGICAL INFORMATION

If swallowed, there is no specific antidote. Treat symptomatically. If a large amount has been ingested and emesis has been inadequate, lavage stomach. The active ingredient in this product, S-Metolachlor, has a high affinity for activated charcoal. A suspension of activated charcoal in water can be given to absorb the remaining toxicant. Skin reactions have been treated with antihistamines and ointments containing an anti-inflammatory agent.

This product contains a petroleum distillate.

PRECAUTIONS

KEEP OUT OF THE REACH OF CHILDREN. Harmful if swallowed. Avoid contact with eyes or prolonged contact with skin. Avoid inhalation of vapours or spray mist. Do not contaminate food, feed, domestic or irrigation water supplies, lakes, streams and ponds.

Wear a long-sleeve shirt, long pants, a hat, and enclosed boots during all activities. For application to ornamentals using hand-held application equipment, wear the previously mentioned clothing plus chemical-resistant gloves. When handling the concentrate wear a long-sleeve shirt, long pants, a hat, enclosed boots, chemical-resistant gloves and goggles or a face shield. Avoid breathing vapours or spray mist. If ventilation is not adequate, wear an appropriate pesticide respirator. Do not eat, drink, smoke or apply cosmetics in areas where there is potential for exposure to this product. Wear freshly

laundered clothes daily. Wash hands and face before eating, drinking, smoking or using the toilet. Store and wash all protective clothing separately from household laundry. Wash clothing in detergent and hot water before reuse.

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

Apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

ENVIRONMENTAL HAZARDS

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body. For the protection of aquatic plants, overspray or drift to important wildlife habitats such as wetlands, sloughs or dry slough borders and water bodies should be avoided. Leave a buffer zone of 29 metres between the last spray swath and the edge of any of these habitats. Drift to emerging vegetation or newly emerged vegetation in shelterbelts or woodlots should be avoided. For tank mixes, consult the label(s) of the tank mix partner(s), and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.

This product contains a petroleum distillate which is moderately to highly toxic to aquatic organisms. Avoid contamination of aquatic systems during application. Do not contaminate these systems through direct application, disposal of waste or cleaning equipment.

CAUTION: Do not graze treated immature crops or cut for hay. Sufficient data are not available to support such use. In the case of corn, immature means before ear emergence. Do not harvest sweet corn within 45 days of application. Do not harvest other corn within 80 days of application. Make only one application per season.

When applied as a tank mix combination, read and observe all label directions, including rates, restrictions, and grazing limitations for each product used in the tank mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on both product labels.

DO NOT APPLY BY AIR.

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 clean-up of spills.

CONTAINER DISPOSAL OR REFILLING:

For recyclable containers:

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.

For refillable containers:

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not use this container for any other purpose.

FOR CHEMICAL EMERGENCY: spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300

DIRECTIONS FOR USE

CROP INFORMATION:

UPI S-MET Herbicide provides selective weed control in:

- Corn (hybrid, silage, seed, sweet)
- Soybeans
- Dry common beans (*Phaseolus vulgaris*)
- Snap common beans (yellow and green)
- Lima beans
- Potatoes
- Sugar beets
- Transplanted tomatoes
- Rutabagas
- Sweet white lupins
- Carrots
- Peas (grown for processing)
- Fruit trees (bearing and non-bearing)
- Strawberries (bearing and newly planted)
- Second-year or older poplar stoolbeds
- Second-year or older transplant or seedling stock of:
 - White Spruce, Norway Spruce, Black Spruce, White Pine, Jack Pine and Red Pine
- Transplanted broccoli, cabbage, cauliflower and mustard greens
- Highbush blueberries (new and established plantings)
- Field peppers
- Outdoor Ornamentals (Woody and Herbaceous)
- Asparagus (established beds)
- Established conifers for field production
- Sweet Potatoes
- Transplanted cantaloupe
- Field Cucumber (Direct seeded)
- Pearl millet (animal feed only)
- Pumpkins
- Winter squashes

WEEDS CONTROLLED:

| | |
|---|--------------------------------|
| American Nightshade ¹ | Fall Panicum |
| Eastern Black Nightshade ¹ | Foxtail (green, yellow, giant) |
| Crabgrass (smooth, hairy) | Old Witchgrass |
| Barnyard Grass | Yellow Nutsedge ² |
| Redroot Pigweed ³ (suppression only) | |

¹ Pre-emergent treatments sometimes give better control than pre-plant surface, pre-plant incorporated or post-emergent treatments.

² Pre-plant incorporated treatment only. Extended periods of dry hot weather following application may result in reduced nutsedge control.

³ Pre-plant incorporated and pre-emergent treatments only.

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

TIMING OF APPLICATION:

| EASTERN CANADA | PRAIRIES & INTERIOR B.C. | COASTAL B.C. |
|--|---|---------------------|
| Pre-plant Surface or Pre-plant Incorporated or Pre-emergent or Early Post-emergent | Pre-plant Incorporated or Pre-emergent if irrigated within 10 days | Pre-emergent |

APPLICATION INFORMATION

DO NOT APPLY BY AIR.

PRE-PLANT SURFACE APPLICATION:

- For minimum tillage (reduced tillage), and no-till (zero-till) systems in corn and soybeans. Do not use for soybean, immature seed.
- Applications may be made up to 30 days before planting.
- To the extent possible, do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.

PRE-PLANT INCORPORATION:

- Immediate incorporation is not necessary.
- Incorporation equipment should include rolling or western harrows.
- On sandy soils, heavy rainfall following an incorporated treatment may cause leaching of the herbicide.

| INCORPORATION INSTRUCTIONS | | |
|---|-----------------------|---------------|
| TYPE OF EQUIPMENT | MAXIMUM WORKING DEPTH | MINIMUM SPEED |
| "S"-Tine (Danish) cultivator | 10 cm | 10 km/hr |
| "C"-Tine cultivator with overlapping sweeps | 10 cm | 10 km/hr |
| Tandem disc (maximum 18 cm spacing between discs) | 10 cm | 6 km/hr |
| Power driven cultivator | 5 cm | any |
| Mulch Master | 5 cm | 10 km/hr |

UPI S-MET Herbicide may be applied as an overall spray or as a band treatment. For band treatment, a suitable press wheel mounted ahead of the nozzle should be used for levelling the band. For band application, use proportionately less material.

PRE-EMERGENT APPLICATION:

- Apply evenly to a firm, lump-free seed bed.
- Rain is required within 10 days or a shallow cultivation or use of a rotary hoe is necessary.
- Pre-emergent applications may also be made in reduced tillage, ridge tillage, and no-till systems in corn and soybeans.
- Minimize exposure of untreated soil when cultivating or fertilizing.

POST-EMERGENT APPLICATION:

- CORN ONLY.
- Apply when corn is in the spike to 6-leaf stage and **before weeds pass the 2-leaf stage**.
- Some leaf burn may occur but yield will not be affected.
- DO NOT tank-mix UPI S-MET Herbicide with fluid fertilizers, oils, oil concentrates or surfactants when applying post-emergent.

Do not graze/feed or harvest corn within 80 days of making a post-emergent application.

CAUTION:

Do not apply to soils that contain less than 1% or more than 10% organic matter. Winter cereals may be planted 4 1/2 months following application. If drought conditions persist after either a pre-plant surface, pre-plant incorporated or pre-emergent application, annual grass control may not be adequate.

LIQUID FERTILIZERS:

Nitrogen solutions or complete liquid fertilizers may replace water as a carrier for pre-plant surface, pre-plant incorporated or pre-emergent application of UPI S-MET Herbicide alone or in tank mixes in corn. Do not use fertilizer solutions for post-emergent applications. Always predetermine the compatibility of UPI S-MET Herbicide or labelled UPI S-MET Herbicide tank mixes with your water or liquid fertilizer carrier by mixing small proportional quantities in advance. Always consult the label of the tank mix partner if tank mixtures are to use liquid fertilizer as the carrier.

DRY BULK GRANULAR FERTILIZERS:

Many dry bulk granular fertilizers may be impregnated with UPI S-MET Herbicide plus AATREX® herbicide for pre-plant incorporated application to control weeds in corn. Prepare the herbicide/fertilizer mixtures by using any commonly used dry bulk fertilizer blender. Spray herbicide mixture uniformly onto fertilizer. If the herbicide/fertilizer mixture is too wet, the use of a highly absorptive powder (generally less than 2% by weight) such as Microcel E, diatomaceous earth or finely powdered clay is recommended.

For best results, apply UPI S-MET Herbicide/fertilizer mixtures or UPI S-MET Herbicide plus AATREX herbicide/fertilizer mixtures uniformly to the soil with properly calibrated equipment immediately after blending and incorporate according to label directions.

Note: Apply a minimum of 225 kg per hectare of dry granular fertilizer impregnated with recommended rates of UPI S-MET Herbicide alone or UPI S-MET Herbicide tank mixtures.

Do not impregnate UPI S-MET Herbicide alone or with AATREX herbicide onto nitrate fertilizers, superphosphates, or limestone.

MIXING AND SPRAYING INSTRUCTIONS:

- . Spray Pressure - 200 - 300 kPa
 - . Spray Volume - minimum 150 litres per hectare. The use of higher water volumes and larger spray tip sizes will generally increase spray deposition and reduce drift.
 - . Keep bypass line at bottom of tank to minimize foaming.
 - . Use 16 mesh suction screens, 50 mesh line and tip screens.
1. Fill sprayer 1/2 full of carrier. Start gentle agitation.
 2. Add wettable powder or wettable granule tank-mix partner, if applicable. Slurry with water first if using liquid fertilizers as the carrier.
 3. Add liquid flowable tank-mix partner, if applicable, and agitate thoroughly.
 4. Fill tank 9/10 full of carrier and add UPI S-MET Herbicide and other emulsifiable concentrate or solution tank-mix partners.
 5. Top off tank with carrier, maintain agitation and spray.
 6. Do not let stand without agitation.
 7. Sprayer equipment should be thoroughly flushed with clean water and drained before and after use of UPI S-MET Herbicide and its tank mixes.

Note: If using Fieldstar™ herbicide ensure that the water soluble packets and the Fieldstar herbicide are completely dissolved before proceeding to the next step.

CORN TANK MIXTURES (EASTERN CANADA ONLY)

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET Herbicide ¹ | RATE PER HECTARE/TANK MIX PARTNER ² |
|---|---|--|---|
| Pre-plant Surface (up to 30 days before planting) | Annual Grasses and Broadleaf Weeds ³ | 1.19 – 1.67 L | 2.1 - 3.1 L AATREX Liquid 480 or 216 g Fieldstar ^{4,7} |
| | Annual Grasses, Emerged Annual or Perennial Weeds | 1.19 – 1.67 L | + 2.6 - 2.7 L TOUCHDOWN [®] 480 ⁵ or 2.0 L TOUCHDOWN 600 ⁵ or 1.7 – 1.8 L TOUCHDOWN TOTAL ^{®5} or 2.35 – 2.5 L TOUCHDOWN iQ ^{®5} or 2.35 - 2.5 L Roundup Transorb [®] or 2.35 - 2.5 L Glyphos ^{®5} or 2.35 - 2.5 L Credit ^{®5} or 2.35 - 2.5 L Vantage [®] or 2.35 - 2.5 L Vantage Plus ⁵ or 2.35 - 2.5 L Renegade ⁵ |
| | Annual Grasses and Broadleaf | 1.19 – 1.67 L | 2.1 - 3.1 L AATREX Liquid 480 ⁶ + 2.6 - 2.7 L TOUCHDOWN 480 ⁵ |

| | | | |
|--|--|--|---|
| | Weeds, Emerged Annual or Perennial Weeds | | or 2.0 L TOUCHDOWN 600 ⁵ or 1.7 – 1.8 L TOUCHDOWN TOTAL ⁵ or 2.35 – 2.5 L TOUCHDOWN iQ ⁵ or 2.35 - 2.5 L Roundup Transorb ⁵ or 2.35 - 2.5 L Glyphos ⁵ or 2.35 - 2.5 L Credit ⁵ or 2.35 - 2.5 L Vantage ⁵ or 2.35 - 2.5 L Vantage Plus ⁵ or 2.35 - 2.5 L Renegade ⁵ |
|--|--|--|---|

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET Herbicide₁ | RATE PER HECTARE/TANK MIX PARTNER² |
|------------------------|--|--|---|
| Pre-plant Incorporated | Nutsedge, Annual Grasses | 1.19 – 1.67 L | UPI S-MET Herbicide applied alone |
| | Nutsedge, Annual Grasses and Broadleaf Weeds | 1.19 – 1.67 L | 2.1 - 3.1 L AATREX Liquid 480 or 216 g Fieldstar ⁷ |
| Pre-emergent | Annual Grasses | 1.19 – 1.67 L | UPI S-MET Herbicide applied alone |
| | Annual Grasses and Broadleaf Weeds | 1.19 – 1.67 L | 2.1 - 3.1 L AATREX Liquid 480 |
| | Annual Grasses and Broadleaf Weeds including triazine tolerant weeds | 1.19 – 1.67 L | + 1.25 L Banvel [®] II ⁷ or 3.7 - 4.5 L Marksman ^{®7,8} OR + 2.1 - 3.1 L AATREX Liquid 480 + 1.25 L Banvel II ⁷ OR + 216 g Fieldstar ⁷ OR + 0.3 L CALLISTO [®] 480SC OR + 0.3 L CALLISTO 480SC + 2.1 - 3.1 L AATREX Liquid 480 |
| | Annual Grasses, Emerged Annual or Perennial Weeds | 1.19 – 1.67 L | + 2.6 - 2.7 L TOUCHDOWN 480 ⁵ or 2.0 L TOUCHDOWN 600 ⁵ or 1.7 – 1.8 L TOUCHDOWN TOTAL ⁵ or 2.35 – 2.5 L TOUCHDOWN iQ ⁵ or 2.35 - 2.5 L Roundup Transorb ⁵ or 2.35 - 2.5 L Glyphos ⁵ or 2.35 - 2.5 L Credit ⁵ or 2.35 - 2.5 L Vantage ⁵ or 2.35 - 2.5 L Vantage Plus ⁵ or 2.35 - 2.5 L Renegade ⁵ |

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET Herbicide ¹ | RATE PER HECTARE/TANK MIX PARTNER ² |
|---|---|---|---|
| | Annual Grasses and Broadleaf Weeds, Emerged Annual or Perennial Weeds | 1.19 – 1.67 L | 2.1 - 3.1 L AATREX Liquid 480 ⁶ + 2.6 - 2.7 L TOUCHDOWN 480 ⁵ or 2.0 L TOUCHDOWN 600 ⁵ or 1.7 – 1.8 L TOUCHDOWN TOTAL ⁵ or 2.35 – 2.5 L TOUCHDOWN IQ ⁵ or 2.35 - 2.5 L Roundup Transorb ⁵ or 2.35 - 2.5 L Glyphos ⁵ or 2.35 - 2.5 L Credit ⁵ or 2.35 - 2.5 L Vantage ⁵ or 2.35 - 2.5 L Vantage Plus ⁵ or 2.35 - 2.5 L Renegade ⁵ |
| Early Post-Emergent (spike to 2-leaf stage) | Annual Grasses | 1.19 – 1.67 L | UPI S-MET Herbicide applied alone |
| | Annual Grasses and Broadleaf Weeds | 1.19 – 1.67 L | 2.1 - 3.1 L AATREX Liquid 480 |
| | Annual Grasses and Broadleaf Weeds including triazine tolerant weeds | 1.19 – 1.67 L | + 3.7 - 4.5 L Marksman ^{7,8} or 600 mL - 1.25 L Banvel II ⁷ OR + 2.3 L AATREX Liquid 480 + 600 mL - 1.25 L Banvel II ⁷ OR + 0.3 L CALLISTO 480SC ⁹ OR + 0.3 L CALLISTO 480SC + 2.1 - 3.1 L AATREX Liquid 480 ⁹ |
| Post- Emergent (3 to 6-leaf stage) (hybrid and silage corn only) | Annual Grasses | 1.19 – 1.67 L | UPI S-MET Herbicide applied alone ⁷ |
| | Annual Grasses and Broadleaf Weeds including triazine tolerant weeds | 1.19 – 1.67 L | + 3.7 - 4.5 L Marksman ^{7, 8, 10} OR 600 mL - 1.25 L Banvel II ^{7, 10} OR + 600 ml – 1.25 L Banvel II ^{7,10} OR + 2.3 L AATREX Liquid 480 + 600 mL - 1.25 L Banvel II ^{7, 10} |

¹ Use the higher rate of UPI S-MET Herbicide for heavier weed populations.

² Consult the label of the product(s) to be tank mixed with UPI S-MET Herbicide for specific instructions regarding broadleaf weeds, soil-type variations, and rotational crop, grazing or other restrictions.

³ Apply pre-plant surface applications of UPI S-MET Herbicide plus AATREX Liquid 480 Herbicide only when emerged annual weeds are less than 6 cm tall. If emerged annual weeds are taller than 6 cm, apply TOUCHDOWN, Roundup, Glyphos, Credit, Vantage or Renegade herbicides prior to the tank mix application or make an application of a 3-way tank mix of UPI S-MET Herbicide plus AATREX plus TOUCHDOWN, Roundup, Glyphos, Credit, Vantage or Renegade herbicides. Consult the tank mix partner label for specific instructions regarding precautions, restrictions, recommended rates and additives.

⁴ Annual broadleaf weeds beyond the 2-leaf stage of growth will not be controlled by surface preplant applications of UPI S-MET Herbicide and Fieldstar herbicide.

⁵ Some perennial weeds may not be controlled with these rates of TOUCHDOWN, Roundup,

Glyfos, Credit, Vantage or Renegade herbicides. Consult the TOUCHDOWN, Roundup, Glyphos, Credit, Vantage or Renegade herbicide labels regarding perennial weeds controlled.

⁶ It is recommended that liquid formulations of products be used when tank mixing with TOUCHDOWN, Roundup, Glyphos, Credit, Vantage or Renegade herbicide. Consult the TOUCHDOWN, Roundup, Glyphos, Credit, Vantage or Renegade herbicide labels for specific instructions regarding precautions, restrictions, recommended rates and additives.

⁷ DO NOT USE THESE TIMINGS OR TANK MIXES ON SEED CORN, SWEET CORN OR POPCORN.

⁸ Use the lower rate of Marksman herbicide on sand or sandy loam soil and the higher rate on loam or clay soils.

⁹ FIELD CORN ONLY.

¹⁰ Do not apply tank mixes containing Marksman or Banvel II beyond the 5 leaf stage of corn.

NOTES for Pre-plant Surface and Pre-emergent Applications Only:

For improved burndown of **small** emerged annual weeds, the following additives may be applied in mixtures of UPI S-MET Herbicide with AATREX Liquid 480 herbicide:

- Crop Oil, 28-0-0 or 10-34-0 at 5% v/v
- Crop oil concentrate at 1% v/v
- Non-ionic surfactant at 0.1% v/v

If annual weeds are larger or perennial weeds are present, use TOUCHDOWN, Roundup, Glyphos, Credit, Vantage or Renegade herbicides in the tank mix (See preceding table).

TANK MIXTURES (WESTERN CANADA ONLY)

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE¹ | RATE PER HECTARE/TANK MIX PARTNER² |
|------------------------------|--|--|--|
| Pre-plant Incorporated | Green and Yellow Foxtail, Barnyard Grass and Broadleaf Weeds | 1.19 – 1.67 L | 2.1 - 3.1 L AATREX Liquid 480 |
| Pre-emergent with irrigation | Green and Yellow Foxtail, Barnyard Grass and Broadleaf Weeds | 1.19 – 1.67 L | 2.1 - 3.1 L AATREX Liquid 480 |

¹ Use the higher rate of UPI S-MET Herbicide for heavier weed problems.

² Consult the label of the product to be tank mixed with UPI S-MET Herbicide for specific instructions regarding soil-type variations and other restrictions.

**SOYBEANS
TANK MIXTURES**

| TIMING | WEEDS CONTROLLED¹ | RATE/HA UPI S-MET HERBICIDE² | RATE PER HECTARE/TANK MIX PARTNER³ |
|--|--|--|--|
| Pre-plant Surface (up to 30 days before planting) | Annual Grasses and Broadleaf Weeds including Nightshade ⁴ | 1.1 – 1.67 L | + 1.0 - 2.2 L Sencor® 500F or Sencor 480F or 670 g - 1.45 kg Sencor 75DF or 670 g - 1.45 kg Lexone™ DF ⁵ |
| | Annual Grasses, Nightshade, Emerged Annual or Perennial Weeds | 1.1 – 1.67 L | + 2.6 - 2.7 L TOUCHDOWN 480 ⁶ or 2.0 L TOUCHDOWN 600 ⁶ or 1.7 - 1.8 L TOUCHDOWN TOTAL ⁶ or 2.35 - 2.5 L TOUCHDOWN iQ ⁶ or 2.35 - 2.5 L Roundup Transorb ⁶ or 2.35 - 2.5 L Glyphos ⁶ or 2.35 - 2.5 L Credit ⁶ or 2.35 - 2.5 L Vantage ⁶ or 2.35 - 2.5 L Vantage Plus ⁶ or 2.35 - 2.5 L Renegade ⁶ |
| | Annual Grasses and Broadleaf Weeds including Nightshade, Emerged Annual or Perennial Weeds | 1.1 – 1.67 L | + 2.6 - 2.7 L TOUCHDOWN 480 ⁶ or 2.0 L TOUCHDOWN 600 ⁶ or 1.7 – 1.8 L TOUCHDOWN TOTAL ⁶ or 2.35 - 2.5 L TOUCHDOWN iQ ⁶ or 2.35 - 2.5 L Roundup Transorb ⁶ or 2.35 - 2.5 L Glyphos ⁶ or 2.35 - 2.5 L Credit ⁶ or 2.35 - 2.5 L Vantage ⁶ or 2.35 - 2.5 L Vantage Plus ⁶ or 2.35 - 2.5 L Renegade ⁶ + 1.0 - 2.2 L Sencor 500F ⁷ or Sencor 480F ⁷ or 670 g - 1.45 kg Sencor 75DF ⁷ or 670 g - 1.45 kg Lexone DF ^{5,7} |
| Pre-plant Incorporated | Nutsedge, Annual Grasses and Nightshade | 1.1 – 1.67 L | UPI S-MET Herbicide applied alone |
| | Nutsedge, Annual Grasses and Broadleaf Weeds including Nightshade | 1.1 – 1.67 L | + 550 - 750 g Sencor 75DF or 850 mL - 1.1 L Sencor 500F or Sencor 480F or 540 - 640 g Lexone DF ⁵ or 312 mL Pursuit ^{®8} |
| Pre-emergent | Annual Grasses and Nightshade | 1.1 – 1.67 L | UPI S-MET Herbicide applied alone |

| TIMING | WEEDS CONTROLLED ¹ | RATE/HA UPI S-MET HERBICIDE ² | RATE PER HECTARE/TANK MIX PARTNER ³ |
|--------------|---|--|--|
| Pre-emergent | Annual Grasses and Broadleaf Weeds including Nightshade | 1.1 – 1.67 L | + 850 mL - 2.25 L Sencor 500F or Sencor 480F or 550 g - 1.5 kg Sencor 75DF or 540 - 960 g Lexone DF ⁵ or 1.6 - 2.5 L Afolan F or 1.9 - 2.3 L Lorox L ⁵ or .75 - 2.25 kg Lorox DF ⁵ or 312 - 420 mL Pursuit ⁸ or 210 - 550 g Lexone DF ⁵ plus 1.4- 2.0 kg Lorox DF ⁵ or 210 - 550 g Lexone DF ⁵ plus 1.5- 2.0 L Lorox L ⁵ or 465 - 665 g Sencor 75DF plus 1.4- 2.0 kg Lorox DF ⁵ or 465 - 665 g Sencor 75DF plus 1.5- 2.0 L Lorox L ⁵ or 750 mL - 1.0 L Sencor 500F or Sencor 480F or Sencor Soybean plus 1.4- 2.0 kg Lorox DF ⁵ or 750 mL-1.0 L Sencor 500F or Sencor 480F or Sencor Soybean plus 1.5- 2.0 L Lorox L ⁵ |
| | Annual Grasses, Nightshade, Emerged Annual or Perennial Weeds | 1.1 – 1.67 L | + 2.6 - 2.7 L TOUCHDOWN 480 ⁶ or 2.0 L TOUCHDOWN 600 ⁶ or 1.7 – 1.8 L TOUCHDOWN TOTAL ⁶ or 2.35 - 2.5 L TOUCHDOWN iQ ⁶ or 2.35 - 2.5 L Roundup Transorb ⁶ or 2.35 - 2.5 L Glyfos ⁶ or 2.35 - 2.5 L Credit ⁶ or 2.35 - 2.5 L Vantage ⁶ or 2.35 - 2.5 L Vantage Plus ⁶ or 2.35 - 2.5 L Renegade ⁶ |

| TIMING | WEEDS CONTROLLED ¹ | RATE/HA UPI S-MET HERBICIDE ² | RATE PER HECTARE/TANK MIX PARTNER ³ |
|--------------|--|--|---|
| Pre-emergent | Annual Grasses and Broadleaf Weeds including Nightshade, Emerged Annual or Perennial Weeds | 1.1 – 1.67 L | + 2.6 - 2.7 L TOUCHDOWN 480 ⁶ or 2.0 L TOUCHDOWN 600 ⁶ or 1.7 – 1.8 L TOUCHDOWN TOTAL ⁶ or 2.35 - 2.5 L TOUCHDOWN iQ ⁶ or 2.35 - 2.5 L Roundup Transorb ⁶ or 2.35 - 2.5 L Glyphos ⁶ or 2.35 - 2.5 L Credit ⁶ or 2.35 - 2.5 L Vantage ⁶ or 2.35 - 2.5 L Vantage Plus ⁶ or 2.35 - 2.5 L Renegade ⁶ + 850 mL - 2.25 L Sencor 500F ⁷ or Sencor 480F ⁷ or 550 g – 1.5 kg Sencor 75DF ⁷ or 540 - 960 g Lexone DF ^{5,7} or 312 - 420 mL Pursuit ⁸ |

¹ For optimum nightshade control, use the higher rate of UPI S-MET Herbicide applied pre-emergently and choose a tank-mix partner which is also registered for the control of nightshade.

² Use the higher rate of UPI S-MET Herbicide for heavier weed problems. For redroot pigweed suppression, apply a minimum of 1.19 L of UPI S-MET Herbicide per hectare.

³ Consult the label of the product(s) to be tank mixed with UPI S-MET Herbicide for specific instructions regarding broadleaf weeds, soil-type variations and rotational crop, grazing or other restrictions.

⁴ Apply pre-plant surface applications of UPI S-MET Herbicide plus Sencor herbicide or UPI S-MET Herbicide plus Lexone herbicide only when emerged annual weeds are less than 6 cm tall. If emerged annual weeds are taller than 6 cm, apply TOUCHDOWN, Roundup, Glyphos, Credit, Vantage or Renegade herbicide prior to the tank mix application or make an application of a 3-way tank mix of UPI S-MET Herbicide plus TOUCHDOWN, Roundup, Glyphos, Credit, Vantage or Renegade herbicide plus Sencor or Lexone herbicide. Consult the tank mix partner label for specific instructions regarding precautions, restrictions, recommended rates and additives.

⁵ Tank mixes with Lexone or Lorox herbicide are for use in eastern Canada only.

⁶ Some perennial weeds may not be controlled with these rates of TOUCHDOWN, Roundup, Glyphos, Credit, Vantage or Renegade herbicide. Consult the TOUCHDOWN, Roundup, Glyphos, Credit, Vantage or Renegade herbicide label regarding perennial weeds controlled.

⁷ It is recommended that liquid formulations of products be used when tank mixing with TOUCHDOWN, Roundup, Glyphos, Credit, Vantage or Renegade herbicide. Consult the TOUCHDOWN, Roundup, Glyphos, Credit, Vantage or Renegade herbicide label for specific instructions regarding precautions, restrictions, recommended rates and additives.

⁸ Do not apply Pursuit herbicide as a pre-plant incorporated application more than one year in sequence. Only soybeans, field corn, spring barley, spring wheat and winter wheat may be planted the season following application of Pursuit herbicide. Winter wheat should not be planted within 120 days of the application of Pursuit herbicide.

CAUTION: Soybeans should be seeded at least 4 cm deep or crop injury may result. Do not apply UPI S-MET Herbicide if soybeans have emerged.

Notes for Pre-plant Surface and Pre-emergent Applications ONLY:

For improved burndown of **small** emerged annual weeds, the following additives may be applied in mixtures of UPI S-MET Herbicide with Sencor 500F, Sencor 480F, Sencor 75DF, Lexone DF, or Pursuit herbicide:

- Crop oil, 28-0-0, or 10-34-0 at 5% v/v
- Crop oil concentrate at 1% v/v

- Non-ionic surfactant at 0.1% v/v

If annual weeds are larger or perennial weeds are present use TOUCHDOWN, Roundup, Glyphos, Credit, Vantage or Renegade herbicide in the tank mix (See preceding table).

OTHER BEANS

SNAP COMMON BEANS (Yellow and Green Only) AND
LIMA BEANS

Eastern Canada and B.C.

| TIMING | WEEDS CONTROLLED | RATE PER HECTARE UPI S-MET HERBICIDE ¹ |
|-------------------------|-----------------------------|---|
| Pre-plant Incorporation | Annual Grasses and Nutsedge | 1.1 – 1.67 L |

¹Use the higher rate of UPI S-MET Herbicide for heavier weed problems. For redroot pigweed suppression apply a minimum of 1.19 L of UPI S-MET Herbicide per hectare.

CAUTION: Beans should be seeded at least 4 cm deep or crop injury may result.

POTATOES TANK MIXTURES

| TIMING | WEEDS CONTROLLED | RATE PER HECTARE UPI S-MET HERBICIDE ¹ | RATE PER HECTARE/TANK MIX PARTNER ² |
|-------------------------|--|---|--|
| Pre-plant Incorporation | Nutsedge, Annual Grasses and Broadleaf Weeds | 1.19 - 1.67 L | + 750 g - 1.5 kg Sencor 75DF or 1.1 - 2.25 L Sencor 500F or Sencor 480F or 830 g - 1.2 kg Lexone DF |
| Pre-emergent | Annual Grasses and Broadleaf Weeds | 1.19 - 1.67 L | + 1.6 - 2.5 L Afolan F or 750 g - 1.5 kg Sencor 75DF or 1.1 - 2.25 L Sencor 500F or Sencor 480F or 830 g - 1.2 kg Lexone DF or 1.9 - 2.3 L Lorox L or 1.75 - 2.25 kg Lorox DF |

¹Use the higher rate of UPI S-MET Herbicide for heavier weed problems.

²Consult the label of the product to be tank mixed with UPI S-MET Herbicide for specific instructions regarding soil-type variations and special restrictions.

CAUTION: Do not apply UPI S-MET Herbicide at ground crack or if potatoes have emerged. Do not use on the variety Superior.

SUGAR BEETS

TIMING OF APPLICATION:

UPI S-MET Herbicide can be applied as:

1. a pre-plant incorporated spray in tank mix combination with Pyramin[®] herbicide or,
2. a pre-emergent spray in tank mix combination with Pyramin herbicide or,
3. a pre-plant incorporated spray, followed by a pre-emergent spray of Pyramin herbicide.

| RATE PER HECTARE UPI S-MET HERBICIDE ¹ | RATE PER HECTARE/TANK MIX PARTNER ² |
|---|--|
| 1.19 - 1.67 L | 8.25 - 10.25 L Pyramin FL 430 g/L |

¹Use the higher rate of UPI S-MET Herbicide for heavier weed problems.

²Consult the Pyramin FL herbicide label for specific instructions regarding soil-type variations and other restrictions.

RUTABAGAS (EASTERN CANADA ONLY)

TIMING OF APPLICATION:

UPI S-MET Herbicide can be applied either as:

1. a pre-plant incorporated spray or,
2. a pre-emergent spray.

| |
|--|
| RATES PER HECTARE UPI S-MET HERBICIDE¹ |
| 1.19 - 1.67 L |

¹Use the higher rate of UPI S-MET Herbicide for heavier weed problems.

To control nutsedge, UPI S-MET Herbicide must be applied as a pre-plant incorporated spray.

**TRANSPLANTED TOMATOES - GROWN FOR PROCESSING
TANK MIXTURES**

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE¹ | RATE PER HECTARE/TANK MIX PARTNER² |
|------------------------|--|--|--|
| Pre-plant Incorporated | Annual Nightshades (American Nightshade, Eastern Black Nightshade), Nutsedge, Annual Grasses and Broadleaf Weeds | 1.19 - 1.67 L | + 0.5 - 1.4 L Sencor 500F or Sencor 480F |

¹Use the higher rate of UPI S-MET Herbicide for heavier weed problems.

²Consult the label of the product to be tank mixed with UPI S-MET Herbicide for specific instructions regarding weeds, rates, soil-type and organic matter variations and other restrictions.

CAUTION: DO NOT APPLY UPI S-MET HERBICIDE ON DIRECT-SEEDED TOMATOES.
NOTE: UPI S-MET HERBICIDE MAY DAMAGE TRANSPLANTS THAT HAVE BEEN WEAKENED BY ANY CAUSE RESULTING IN REDUCED CROP YIELD. TO PREVENT DAMAGE, PLANT ONLY HEALTHY TRANSPLANTS. DO NOT PLANT WHEN WET, COOL OR UNFAVOURABLE GROWING CONDITIONS EXIST. FOLLOW ALL APPLICATION AND INCORPORATION DIRECTIONS EXACTLY.

SWEET WHITE LUPINS

| WEEDS CONTROLLED | TIMING | RATE/HA UPI S-MET HERBICIDE¹ | REMARKS |
|-------------------------|---------------|--|--|
| Annual Grasses | Pre-emergent | 1.05 - 1.67 L | Make one treatment per year with ground application equipment. Apply in 200 - 300 L of total volume per hectare. |

¹Use the higher rate of UPI S-MET Herbicide for heavier weed problems. For redroot pigweed suppression apply a minimum of 1.19 L of UPI S-MET Herbicide per hectare.

TANK MIXTURE (EASTERN CANADA ONLY)

| WEEDS CONTROLLED | TIMING | RATE/HA¹ |
|-------------------------|---------------|----------------------------|
|-------------------------|---------------|----------------------------|

| | | |
|--|--------------|--|
| Annual Grasses and Broadleaf Weeds including Nightshade ³ | Pre-emergent | UPI S-MET Herbicide ² 1.05 - 1.67 L plus Lorox DF 2.0 - 3.0 kg |
|--|--------------|--|

REMARKS:

Make one treatment per year using ground application equipment. Apply in 200 - 300 L of water/ha. **Do not spray after lupins have emerged.** Lupins should be planted at least 5 cm deep. Use the lower rate of Lorox DF herbicide on light coloured soils with less than 2% organic matter. Do not harvest lupins within 80 days of treatment.

¹ Consult the label of the product to be tank mixed with UPI S-MET Herbicide for additional specific instructions regarding broadleaf weeds, soil-type variations and rotational crop, grazing or other restrictions.

² Use the higher rate of UPI S-MET Herbicide for heavier weed problems. For redroot pigweed suppression apply a minimum of 1.19 L of UPI S-MET Herbicide per hectare.

³ For optimum nightshade control, use the higher rate of UPI S-MET Herbicide.

SWEET WHITE LUPINS**TANK MIXTURE (MARITIMES ONLY)**

| WEEDS CONTROLLED | TIMING | RATE/HA ¹ |
|--|-----------------------------------|--|
| Annual Grasses and Broadleaf Weeds including Nightshade ³ | At planting or Pre-emergent | UPI S-MET Herbicide ² 1.05 - 1.67 L plus Sencor 75DF 670 g |

REMARKS:

Make one application per year. Apply as a broadcast spray during planting or as a separate operation after planting but **before** the crop has emerged. Lupin seed must be planted at least 4 cm below the soil surface. Do **not** apply to sandy or light soils with less than 2% organic matter or to muck soils. Better weed control will be obtained if light rainfall or irrigation follows application.

Rotational crops such as onions, celery, peppers, cole crops, lettuce, spinach, sugar beets, table beets, turnips, pumpkins, squash, cucumbers and melons, tobacco and non-triazine tolerant canola are sensitive to Sencor herbicide and may be injured if planted into soil treated with Sencor herbicide during the year of application and the following year. After-harvest tillage practices which provide thorough mixing of the soil may be helpful in reducing the possibility of injury to succeeding crops. Do **not** use treated vines for feed and forage.

¹ Consult the label of the product to be tank mixed with UPI S-MET Herbicide for additional specific instructions regarding broadleaf weeds, soil-type variations and rotational crop, grazing or other restrictions.

² Use the higher rate of UPI S-MET Herbicide for heavier weed problems. For redroot pigweed suppression apply a minimum of 1.19 L of UPI S-MET Herbicide per hectare.

³ For optimum nightshade control, use the higher rate of UPI S-MET Herbicide.

FIRST-YEAR (NON-BEARING) APPLE, APRICOT, SWEET AND SOUR CHERRY, PEACH, PEAR, PLUM TREES

| TIMING | WEEDS CONTROLLED | RATE/HA | REMARKS |
|--------------------------------------|--|---|---|
| Post planting, pre-emergent to weeds | Annual Grasses and Broadleaf Weeds (Late-season emerging fall panicum and crabgrass may not be controlled by this treatment) | UPI S-MET Herbicide ¹ 1.19 - 1.67 L plus PRINCEP NINE-T ^{®1} 1.1 - 2.2 kg | Apply once per year. Avoid contact with trunk and leaves of trees. Do not use on sandy soils with less than 2% organic matter. Best results are obtained with applications made after rain has settled the soil around trees. Use only a tractor-mounted boom sprayer to apply. |

¹ Use the higher rate of UPI S-MET Herbicide and PRINCEP Nine-T herbicide for heavier weed problems.

ESTABLISHED (BEARING) APPLE, APRICOT, SWEET AND SOUR CHERRY, PEACH, PEAR, PLUM TREES

| TIMING | WEEDS CONTROLLED | RATE/HA | REMARKS |
|--------------------------------------|--|--|--|
| Post planting, pre-emergent to weeds | Annual Grasses | UPI S-MET Herbicide 1.67 L | Apply once per year as a band under the trees. Avoid contact with trunk and leaves of trees. Do not use on sandy soils with less than 2% organic matter. Use only a tractor-mounted boom sprayer to apply. |
| | Annual Grasses and Broadleaf Weeds (Late-season emerging fall panicum and crabgrass may not be controlled by this treatment) | UPI S-MET Herbicide 1.67 L plus PRINCEP NINE-T 2.5 kg | Apply once per year as a band treatment under the trees. Avoid contact with trunk and leaves of trees. Do not use on sandy soils with less than 2% organic matter. Use only a tractor-mounted boom sprayer to apply. |
| | Annual Grasses and Broadleaf Weeds | UPI S-MET Herbicide 1.67 L plus Lexone DF 1.0 kg | Apply once per year as a band under the tree(s). Avoid contact with trunk and leaves of trees. Do not use on sandy soils with less than 2% organic matter. Use only a tractor-mounted boom sprayer to apply. |

PROCESSING PEAS (Eastern Canada only)

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE ¹ | REMARKS |
|--------------|--|--|---|
| Pre-emergent | Eastern Black Nightshade, Annual Grasses | 1.19 - 1.67 L | Make one application per year. Apply in 150 - 250 L water/ha. Apply by ground application equipment only. |

¹Use the higher rate of UPI S-MET Herbicide for heavier weed problems.

SECOND-YEAR OR OLDER WHITE SPRUCE, NORWAY SPRUCE, BLACK SPRUCE, WHITE PINE, JACK PINE AND RED PINE TRANSPLANT OR SEEDLING STOCK AND POPLAR STOOLBEDS

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE ¹ | REMARKS |
|--|------------------------------------|--|---|
| Pre-emergent or early post-emergent to weeds | Annual Grasses and Broadleaf Weeds | 1.19 - 1.67 L | Apply to spruce and pine in forest tree nurseries prior to budbreak. DO NOT APPLY UPI S-MET HERBICIDE WITHIN 4 WEEKS AFTER BURST OR UNTIL THE NEEDLES HAVE HARDENED. May be applied as a pre-emergent or early post-emergent application to weeds before they pass the 2 leaf stage. For Poplar Stoolbeds, apply to dormant and flushing stoolbeds. |

¹Use the higher rate of UPI S-MET Herbicide for heavier weed problems.

READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS

NOTE TO USER:

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 performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used on the crops listed below.

Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold United Phosphorus, Inc. harmless from any claims based on efficacy and/or phytotoxicity in connection with the uses described below.

TRANSPLANTED CABBAGE, TRANSPLANTED CAULIFLOWER, TRANSPLANTED BROCCOLI

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE ¹ | REMARKS |
|--|---|--|---|
| Post Transplant Apply within 2 days after transplanting and prior to weed emergence. Do not incorporate. | Nightshade, Annual Grasses and Redroot Pigweed ² | 1.19 - 1.67 L | Make one application per year. Apply in 300 L water/ha. Apply by ground application equipment only. |

¹ Use the higher rate of UPI S-MET Herbicide for heavier weed problems.

² Suppression only.

**TRANSPLANTED TOMATOES - GROWN FOR PROCESSING
TANK MIXTURES**

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE ¹ | RATE PER HECTARE/TANK MIX PARTNER ² |
|---------------------------|---|--|--|
| Pre-plant Incorporated | Annual Nightshades (American Nightshade, Eastern Black Nightshade), Nutsedge, Annual Grasses and Broadleaf Weeds | 0.95 – 1.19 L | + 330 - 660 g Sencor 75DF plus 1.0 – 2.0 L Treflan™ EC ^{3,4} or 500 mL - 1 L Sencor 500F or Sencor 480 plus 1.0 – 2.0 L Treflan EC ^{3,4} |

¹ Use the higher rate of UPI S-MET Herbicide for heavier weed problems and for control of nightshade.

² Consult the label of the product to be tank mixed with UPI S-MET Herbicide for specific instructions regarding weeds, rates, soil-type and organic matter variations and other restrictions.

³ Use lower rates on light textured soils, higher rates on heavier soils.

⁴ Make Only One Application Per Year. Do Not Apply Within 60 Days Of Harvest.

CAUTION: DO NOT APPLY ON DIRECT-SEEDED TOMATOES.

NOTE: UPI S-MET Herbicide MAY DAMAGE TRANSPLANTS THAT HAVE BEEN WEAKENED BY ANY CAUSE RESULTING IN REDUCED CROP YIELD. TO PREVENT DAMAGE, PLANT ONLY HEALTHY TRANSPLANTS; DO NOT PLANT WHEN WET, COOL OR UNFAVOURABLE GROWING CONDITIONS EXIST. FOLLOW ALL APPLICATION AND INCORPORATION DIRECTIONS EXACTLY.

TRANSPLANTED TOMATOES – FIELD TOMATOES GROWN FOR FRESH MARKET

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE ¹ | RATE PER HECTARE/TANK MIX PARTNER ² |
|---------------------------|---|--|---|
| Pre-plant Incorporated | Annual Nightshades (American Nightshade, Eastern Black Nightshade), Nutsedge, and Annual Grasses | 1.19 - 1.67 L | |
| Pre-plant Incorporated | Annual Nightshades (American Nightshade, Eastern Black Nightshade), Nutsedge, Annual Grasses and Broadleaf Weeds | 1.19 - 1.67 L | + 0.5 - 1.4 L Sencor 500F or Sencor 480F |

¹ Use the higher rate of UPI S-MET Herbicide for heavier weed problems.

² Consult the label of the product to be tank mixed with UPI S-MET Herbicide for specific instructions regarding weeds, rates, soil-type and organic matter variations and other restrictions.

REMARKS:

Apply in 150 - 300 L water/ha. Make only one application per year. Do not harvest within 60 days after application.

CAUTION: DO NOT APPLY UPI S-MET HERBICIDE ON DIRECT-SEEDED TOMATOES.

NOTE: UPI S-MET Herbicide MAY DAMAGE TRANSPLANTS THAT HAVE BEEN WEAKENED BY ANY CAUSE RESULTING IN REDUCED CROP YIELD. TO PREVENT DAMAGE, PLANT ONLY HEALTHY TRANSPLANTS. DO NOT PLANT WHEN WET, COOL OR UNFAVOURABLE GROWING CONDITIONS EXIST. FOLLOW ALL APPLICATION AND INCORPORATION DIRECTIONS EXACTLY. Tomato varieties differ in tolerance to UPI S-MET Herbicide.

Since not all tomato varieties have been tested for tolerance to UPI S-MET Herbicide, first use of UPI S-MET Herbicide should be limited to a small area of each variety to confirm tolerance prior to adoption as a general field practice. Additionally, consult your plant supplier for information on the tolerance of specific tomato varieties to UPI S-MET Herbicide.

NEWLY PLANTED STRAWBERRIES

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE ¹ | REMARKS |
|---|--|--|---|
| Pre-Emergent or Pre-emergent (post transplanting) | Annual grasses and nutsedge ² | 1.19 – 1.67 L | Make only one application per year. Apply as either a pre-plant incorporated or pre-emergent (post transplanting) treatment. Some initial injury may occur but will be outgrown with no reduction in yield. Do not apply to cultivar Joliette. Do not harvest berries from varieties bearing fruit in the first year of planting. Apply by ground application equipment only. |

¹ Use the higher rate of UPI S-MET Herbicide for heavier weed problems.

² Pre-plant incorporated treatment only. Extended periods of dry hot weather following application may result in reduced nutsedge control.

SWEET CORN TANK MIXTURE

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE | RATE ¹ PER HECTARE/ TANK MIX PARTNER | REMARKS |
|--------------|--|-----------------------------|---|--|
| Pre-emergent | Annual grasses and broadleaf weeds including triazine tolerant weeds | 1.19 L | + 790 mL– 1.56 L Afolan F or 790 mL – 1.56 L Lorox L or 750 g – 1.5 kg Lorox DF | Make only one application per year. Apply as pre-emergent treatment. Apply in 150 L water/ha minimum. Do not harvest sweet corn within 50 days of treatment. Apply by ground equipment only. |

¹Consult the label of the product to be tank mixed with UPI S-MET Herbicide for specific instructions regarding soil-type variations and other restrictions.

DRY COMMON BEANS

| CROP | TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE ¹ | REMARKS |
|--|---|--|--|---|
| Dry Common Beans (<i>Phaseolus vulgaris</i> species only) | Pre-plant incorporated OR Pre-emergent soil application | American Nightshade ² Fall Panicum Eastern Black Nightshade ² Foxtail (green, yellow, giant) Crabgrass (smooth, hairy) Old Witchgrass Barnyard Grass Yellow Nutsedge ³ Redroot Pigweed ⁴ | 1.1 to 1.67 L | <p>Make only one application per year.</p> <p>Apply in 150 L water/ha. Apply by ground application equipment only.</p> <p>NOTE: Dry common bean varieties may vary in their tolerance to herbicides, including to UPI S-MET Herbicide. Since not all dry common bean varieties have been tested for tolerance to UPI S-MET Herbicide, first use of UPI S-MET Herbicide should be limited to a small area of each variety to confirm tolerance prior to adoption as a general field practice. Additionally, consult your seed supplier for information on the tolerance of specific varieties of dry common beans to UPI S-MET Herbicide.</p> <p>CAUTION: Beans should be seeded at least 4 cm deep or crop injury may result.</p> |

¹ Use the higher rate of UPI S-MET Herbicide for heavier weed problems.

² Pre-emergent treatments sometimes give better control than pre-plant incorporate

³ Pre-plant incorporated treatment only. Extended periods of dry hot weather following application may result in reduced nutsedge control.

⁴ Suppression only.

DRY COMMON BEANS TANK MIXTURE (EASTERN CANADA ONLY)

| CROP | TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE ¹ | RATE/HA TANK MIX PARTNER ² | REMARKS |
|--|------------------------|---|--|---------------------------------------|---|
| Dry Common Beans (<i>Phaseolus vulgaris</i> species only) | Pre-plant incorporated | American Nightshade, Eastern Black Nightshade, Fall Panicum, Foxtail (green, yellow, giant), Crabgrass (smooth, hairy), Old Witchgrass, Barnyard Grass, Yellow Nutsedge ³ , Redroot Pigweed ⁴ | 1.1 to 1.67 L | 0.312 L Pursuit Herbicide | <p>Make only one application per year. Apply in 150 L – 400 L water/ha. Apply by ground application equipment only.</p> <p>DO NOT harvest within 100 days of treatment.</p> <p>NOTE: Dry common bean varieties may vary in their tolerance to herbicides, including to UPI S-MET Herbicide. Since not all dry common bean varieties have been tested for tolerance to the tankmix of Pursuit plus UPI S-MET Herbicide, first use of this tankmix should be limited to a small area of each variety to confirm tolerance prior to adoption as a general field practice. Additionally, consult your seed supplier for information on the tolerance of specific varieties of dry common beans to the tankmix of Pursuit plus UPI S-MET Herbicide.</p> <p>CAUTION: Beans should be seeded at least 4 cm deep or crop injury may result.</p> |

¹ Use the higher rate of UPI S-MET Herbicide for heavier weed problems.

² Refer to the Pursuit Herbicide label for additional recommendations, precautions and restrictions not specified on this label.

³ Extended periods of dry hot weather following application may result in reduced nutsedge control.

⁴ Suppression only.

**CRANBERRY BEANS AND KIDNEY BEANS
FOR USE IN EASTERN CANADA ONLY**

| CROP | TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE¹ | RATE/HA TANK MIX PARTNER² | REMARKS |
|-----------------|---|--|--|---|---|
| Cranberry Beans | Pre-plant incorporated OR Pre-emergent soil application | American Nightshade ³ Eastern Black Nightshade ³ Fall Panicum | 1.1 to 1.67 L | + 0.312 L Pursuit Herbicide | Make only one application per year. Apply by ground application equipment only. CAUTION: Beans should be seeded at least 4 cm deep or crop injury may result. |
| Kidney Beans | Pre-plant incorporated OR Pre-emergent soil application | Foxtail (green, yellow, giant) Crabgrass (smooth, hairy) Old Witchgrass Barnyard Grass Yellow Nutsedge ⁴ Redroot Pigweed ⁵ | 1.1 to 1.67 L | + 0.312 L Pursuit Herbicide | |

¹ Use the higher rate of UPI S-MET Herbicide for heavier weed problems.

² Consult the label of the product to be tank mixed with UPI S-MET Herbicide for specific instructions regarding soil-type variations and other restrictions.

³ Pre-emergent treatments sometimes give better control than pre-plant incorporated.

⁴ Pre-plant incorporated treatment only. Extended periods of dry hot weather following application may result in reduced nutsedge control.

⁵ Suppression only.

SUGAR BEETS

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE¹ | REMARKS |
|---|----------------------------|--|--|
| Post-emergent, apply within the period from cotyledon to 4 leaf stage of sugar beets, but before weed emergence | Nightshade, Annual Grasses | 1.19 – 1.67 L | Make only one application per year. Apply in 150 – 300 L water/ha. Apply by ground application equipment only. Do not use more than 1 application per year. Do not harvest within 120 days of treatment. DO NOT USE SUGAR BEET TOPS FOR FEEDING TO LIVESTOCK. |

¹ Use the higher rate of UPI S-MET Herbicide for heavier weed problems.

NOTE: DO NOT tank-mix UPI S-MET Herbicide with fluid fertilizers, oils, oil concentrates or surfactants when applying post-emergent.

FIELD PEPPERS

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE¹ | REMARKS |
|--|----------------------------|--|--|
| Post-emergent, apply within 48 hours of transplanting, but before weed emergence | Nightshade, Annual Grasses | 1.1 – 1.19 L | Apply in a minimum of 150 L water/ha. Apply by ground application equipment only. Do not harvest within 80 days of treatment. Risk of crop injury increases with early transplanting and soil temperatures below 10°C. Applications made more than 48 hours after transplanting may increase the risk of foliar injury. Using the lower application rate for field peppers may result in reduced control in heavy weed populations. |

¹ Use the higher rate of UPI S-MET Herbicide for heavier weed problems.

NOTE: DO NOT tank-mix UPI S-MET Herbicide with fluid fertilizers, oils, oil concentrates or surfactants when applying post-emergent.

SOYBEANS – SUPPRESSION OF TALL WATERHEM

| TIMING | RATE/HA UPI S-MET HERBICIDE | REMARKS |
|--------------|-----------------------------------|---|
| Pre-emergent | 1.67 L | Make only one application per year. Apply in a minimum of 150 L water/ha. Apply by ground application equipment only. |

PUMPKIN AND WINTER SQUASH

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE | REMARKS |
|---|--|-----------------------------------|---|
| Direct seeded: Pre-emergence (prior to weed emergence) OR Post-emergent (1-2 leaf pumpkin or winter squash), prior to weed emergence) | Nightshade, Annual Grasses and Redroot Pigweed ¹ | 1.1 L | Make only one application per year. Apply in a minimum of 150 - 200L water/ha. Apply by ground application equipment only. Do not harvest within 65 days of treatment. Application of UPI S-MET may result in injury to the pumpkin or winter squash crop which may include stand loss, delayed maturity and even loss of yield. Reduced control in heavy weed populations may occur. |

¹ Suppression only.

OUTDOOR ORNAMENTALS (Woody and Herbaceous): Container-, Field- and Liner*-Grown Plants and Plants in Landscape Plantings

The following plant species have been tested results indicated that they are tolerant to UPI S-MET Herbicide when the product is applied according to the label.

Tolerance Plant Species

| Plant Category | Common name | Scientific name |
|----------------|---------------------|--------------------------|
| Broadleaf | Burning bush | <i>Euonymus</i> spp. |
| | Rhododendron | <i>Rhododendron</i> spp. |
| Herbaceous | Daylily | <i>Hemerocallis</i> spp. |
| | Hosta | <i>Hosta</i> spp. |
| Conifer | Juniper | <i>Thuja</i> spp. |
| | Eastern white-cedar | <i>Juniperus</i> spp. |

UPI S-MET Herbicide may be applied to other non-listed plant species. However, non-listed plant species may vary in their tolerance to herbicides, including UPI S-MET Herbicide. First use of UPI S-MET Herbicide to any non-listed plant species should be limited to a small number of plants to confirm tolerance prior to adoption as a large scale practice.

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE | REMARKS |
|---|---|-----------------------------|---|
| Pre-emergence (prior to weed emergence) OR Early Post-emergent (1-2 leaf weed stage) | Nightshade, Annual Grasses and Redroot Pigweed ¹ | 1.19 – 1.67 L | Make only one application per year. Apply in a minimum of 150 – 200 L water/ha. Apply by ground application equipment only. To avoid plant injury, do not apply to seedbeds, cutting beds, or uprooted cuttings before transplanting and to plants until the soil has firmly settled around roots. When applied broadcast over-the-top of plant foliage, follow with sufficient overhead irrigation to wash UPI S-MET Herbicide from the foliage to reduce the chance of injury. Do not apply to trees or plants that will bear harvestable fruit within 12 months, or illegal residues may result. Do not use this product in residential areas where bystanders including children, may be potentially exposed during or after spraying. |

¹Suppression only

*Plants transplanted normally in rows in a nursery or similar area for further growth before transplanting to final growing location (place of establishment).

ASPARAGUS (Established beds)

WARNING: Application of UPI S-MET Herbicide may result in injury to the asparagus crop, which may include potential stand loss, delayed maturity, and even loss of yield.

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE | REMARKS |
|---|--|-----------------------------|---|
| In the spring, apply to dormant asparagus beds prior to emergence OR Post-harvest | American Nightshade, Eastern Black Nightshade, Crabgrass (smooth, hairy), Barnyard Grass, Fall Panicum, Foxtail (green, yellow, giant), Old Witchgrass, and Redroot Pigweed ¹ | 1.48 – 1.67 L | Make only one application per year. Apply by ground application equipment only. PHI is 16 days. |

¹Suppression only

CONIFERS (Established for field production)

UPI S-MET Herbicide has been tested on Balsam fir, Fraser fir, White pine, and White spruce. UPI S-MET Herbicide may be applied to other non-listed conifer species; however, non-listed conifer species may vary in tolerance to herbicides, including UPI S-MET Herbicide. First use of UPI S-MET Herbicide to any non-listed conifer species should be limited to a small number of plants to confirm tolerance prior to adoption as a large scale practice.

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE ¹ | REMARKS |
|---|----------------------------------|--|--|
| Pre-emergent to weeds as per label directions | Annual broadleaf and grass weeds | 1.19 – 1.67 L | Make only one ground application per year, banded over top of trees. Apply in a minimum of 300L water/ha. |

¹Use higher rate for heavier weed infestations.

CONIFERS (Established for field production)

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET Herbicide ² | RATE/HA SIMAZINE 480 HERBICIDE ³ | REMARKS |
|--|-----------------------------|--|---|--|
| Pre-emergent or early post-emergent (before 2 leaf stage) to weeds | Labelled weeds ¹ | 1.19 – 1.67 L | 4.7 – 7.0 L | Make only one ground application per year. Apply in a minimum of 150L water/ha. |

¹ See Simazine 480 for further information.

² Use higher rate for heavier weed infestations.

³ Use lowest rate in sandy or low organic matter soils; use highest rate in clay or high organic matter soils.

MUSTARD GREENS – transplanted only (DO NOT apply to direct-seeded crop)

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE ¹ | REMARKS |
|---|---|--|---|
| Pre-emergent or post-emergent (weeds at 2-leaf stage or less) | Labelled annual broadleaf and grass weeds | 1.14 – 1.43 L | Make only one ground application per year. Apply in a minimum of 150-300 L/ha water. PHI is 30 days. Yield losses may be observed when this product is applied to transplanted mustard greens. |

¹ Reduced levels of weed control may be observed when weed densities are high.

HIGHBUSH BLUEBERRIES (new and established plantings)

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE | REMARKS |
|-------------------------------|--|-----------------------------|--|
| Pre-emergent to labeled weeds | Nightshade (American and Eastern black), crabgrass (smooth, hairy), barnyard grass, fall panicum, foxtail (green, yellow, giant), old witchgrass Redroot pigweed (suppression only) | 1.19 – 1.67 L | Make only one application per year. Apply in 150 - 300 L water/ha. DO NOT APPLY BY AIR, ground application only. DO NOT harvest within 30 days of treatment. Apply to the soil as a banded application, directed to the base of the highbush blueberry plants. Avoid contact with the highbush blueberry truck and foliage. Crop injury and yield reduction may occur if any part of the highbush blueberry plants are contacted through spray or drift. |

STRAWBERRIES (bearing years)

Strawberry cultivars may vary in their tolerance to herbicides, including UPI S-MET Herbicide. Since not all strawberry cultivars have been tested for tolerance to UPI S-MET Herbicide, first use of UPI S-MET Herbicide should be limited to a small area of each variety to confirm tolerance prior to adoption as a general field practice. Additionally, consult your supplier for information on the tolerance of specific cultivars of strawberry to UPI S-MET Herbicide. **Do not apply to the cultivar Joliette.**

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE ¹ | REMARKS |
|---|---|--|--|
| After mulch removal but before weed emergence | Labelled annual broadleaf and grass weeds | 1.19 – 1.67 L | Make only one ground application per year (post-plant). Apply in 150 L/ha water. PHI is 30 days. |

¹Use the higher rate of UPI S-MET Herbicide for heavier weed problems.

CARROTS

| TIMING | WEEDS CONTROLLED | UPI S-MET HERBICIDE RATE | REMARKS |
|--|--|--------------------------|--|
| Post-emergent (crop at 3-5 leaf stage and weeds prior to 2-leaf stage) | American nightshade, fall panicum, eastern black nightshade, foxtail (green, yellow, giant), crabgrass (smooth, hairy), old witchgrass, and barnyard grass | 1.14-1.43 L/ha | Make only one application per year. Apply by ground (broadcast) application only. Apply in 150 - 300L water/ha. Reduced levels of weed control may be observed when weed densities are high. PHI is 30 days. |

CANTALOUPE (TRANSPLANTED)

| TIMING | WEEDS CONTROLLED | UPI S-MET HERBICIDE RATE | REMARKS |
|--------|------------------|--------------------------|---------|
|--------|------------------|--------------------------|---------|

| | | | |
|--|---|---------------|--|
| Pre-emergence to labeled weeds prior to transplanting or within 48 hours after transplanting | Nightshade, Annual Grasses and Redroot Pigweed ¹ | 1.1-1.67 L/ha | Make one application per year. Apply in a minimum of 150 L water/ha. Apply by ground application only, banded to row middles after plastic mulch has been laid. Applications should be made prior to transplanting or within 48 hours after transplanting. Post-transplant applications have significant potential to cause crop injury. Care should be taken to minimize cantaloupe contact with UPI S-MET (spray or drift) this can increase potential to cause crop injury. PHI is 60 days. |
|--|---|---------------|--|

¹Suppression only.

FIELD CUCUMBER (Direct seeded)

| TIMING | WEEDS CONTROLLED | UPI S-MET HERBICIDE RATE | REMARKS |
|--|---|--------------------------|---|
| Early post-emergence (1 to 2 leaf cucumber, prior to weed emergence) | Nightshade, Annual Grasses and Redroot Pigweed ¹ | 1.1 L/ha | Make only one ground application per year. Apply in a minimum spray volume of 150 L water/ha. Application of UPI S-MET may result in injury to the cucumber crop, which may include stand loss and even loss of yield. Avoid overspray. PHI is 32 days. |

¹Suppression only.

SWEET POTATOES

| TIMING | WEEDS CONTROLLED | UPI S-MET HERBICIDE RATE | REMARKS |
|---|---|--------------------------|---|
| Early post-emergence (2 – 5 days after transplanting) | Labelled annual broadleaf and grass weeds | 1.19 – 1.67 L | Make only one application per year. Apply foliar by ground application only. Apply using a spray volume of 200 - 400 L water/ha. PHI is 105 days. |

PEARL MILLET GROWN FOR ANIMAL FEED (GRAIN OR FORAGE) (EASTERN CANADA ONLY)

| TIMING | WEEDS CONTROLLED | RATE/HA UPI S-MET HERBICIDE | REMARKS |
|--|---|-----------------------------|--|
| Early post-emergent to crop (1-2 leaf stage); pre to early post-emergent to weeds (up to 1-leaf stage) | Suppression of: Smooth crabgrass, Green foxtail, Barnyard grass | 0.6 L | <p>Make only one application per year. Apply by ground application only. DO NOT APPLY BY AIR. Apply in 200 L water/ha. Do not harvest pearl millet for forage within 45 days of application. Do not harvest pearl millet for grain within 130 days of application. For use in pearl millet for animal feed only. Treated grain millet is not intended for human consumption.</p> <p>Application of UPI S-MET will result in injury to the pearl millet crop which may include stand loss, delayed maturity and even loss of yield. AVOID SPRAY OVERLAP. Millet should be seeded at least 2.5 cm deep or crop injury may result. Use on soil that has a minimum of 2.5% organic matter.</p> |

Resistance-Management Recommendations

For resistance management, UPI S-MET Herbicide is a Group 15 herbicide. Any weed population may contain or develop plants naturally resistant to UPI S-MET Herbicide and other Group 15 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 UPI S-MET Herbicide or other Group 15 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 and to report suspected resistance, contact company representatives at 1-800-438-6071.

Consult the label of products to be tank mixed or split applied with UPI S-MET Herbicide for specific crop recommendations.

ADHERE TO THESE PRODUCT LABELS FOR BROADLEAF WEEDS CONTROLLED, PRECAUTIONS, WARNINGS, RESTRICTIONS, TANK MIXING AND SPRAYING INSTRUCTIONS, ROTATIONAL CROPS AND DETAILED DIRECTIONS FOR USE REGARDING DOSAGE VARIATIONS ACCORDING TO SOIL TYPE.

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