

Container label

GROUP	27	HERBICIDE
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**MESTER 480SC Herbicide**  
AGRICULTURAL  
SUSPENSION

A herbicide for use in field, seed, and sweet corn, MGI tolerant soybeans, mesotrione tolerant soybeans, flax, cranberry, asparagus (established), blueberry, rhubarb, pearl millet, sorghum and turf for control of annual broadleaf weeds.

**GUARANTEE:**

Mesotrione ..... 480 g/L

Contains 1,2-benzisothiazolin-3-one at 0.002 % as a preservative.

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

**POTENTIAL SKIN SENSITIZER**

REGISTRATION NO.: **33632** PEST CONTROL PRODUCTS ACT

NET CONTENTS: **1 L – Bulk**

**SHARDA Cropchem Limited**  
2nd Floor, Prime Business Park  
Dashrathlal Joshi Road  
Vile Parle (West)  
Mumbai - 400056, India

Canadian Agent:  
**SHARDA Cropchem Limited**  
63 Kingsview Blvd  
Etobicoke, Ontario, CA  
M9R1V1  
1-844-810-5720  
1-416-840-5639

## **NOTICE TO USER**

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

## **FIRST AID**

**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.

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.

## **TOXICOLOGICAL INFORMATION**

Treat symptomatically if ingested or in contact with eyes or skin. If gastric lavage is considered necessary, prevent aspiration of gastric material. Administration of activated charcoal may also be considered.

## **PRECAUTIONS**

**KEEP OUT OF REACH OF CHILDREN.**

Potential skin sensitizer.

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, protective eyewear (goggles or face shield), socks and shoes during mixing, loading, application, clean-up and repair. Gloves are not required during groundboom application. Wash the outside of the gloves before removing.

Wash splashes from skin and eyes **IMMEDIATELY** with plenty of water. While spraying, wear a long sleeve shirt and long pants. Wear chemical-resistant gloves if contact with spray nozzles is necessary.

Avoid working in spray mist. Avoid all drift or contact with other vegetation. After spraying, wash hands and shower thoroughly with soap and water. While using product, do not eat, drink or smoke. Wash hands and exposed skin with soap and water thoroughly before eating, drinking, smoking, applying cosmetics or using the toilet. Keep product away from food, drink and animal feed. Store product in original container, tightly closed and in a safe place.

**DO NOT** use or store product near heat or open flame. **DO NOT** apply beyond the field boundary.

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

12 hours after application.

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. Read and follow all tank mix partner labels and observe the most stringent label restrictions, precautions and instructions for each tank mixture.

### **STORAGE**

Always store product in original container with top closed in a cool, dry place. Avoid contamination of seed, feed and foodstuffs. MESTER 480SC Herbicide can be stored in freezing conditions. If frozen, allow to thaw and agitate thoroughly prior to use.

### **DECONTAMINATION AND DISPOSAL**

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

### **CONTAINER DISPOSAL:**

#### **FOR DISPOSAL OF PLASTIC JUGS:**

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

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

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

#### **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 reuse this container for any other purpose.

Booklet

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**MESTER 480SC Herbicide**  
AGRICULTURAL  
SUSPENSION

A herbicide for use in field, seed, and sweet corn, MGI tolerant soybeans, mesotrione tolerant soybeans, flax, cranberry, asparagus (established), blueberry, rhubarb, pearl millet, sorghum and turf for control of annual broadleaf weeds.

**GUARANTEE:**

Mesotrione ..... 480 g/L

Contains 1,2-benzisothiazolin-3-one at 0.002 % as a preservative.

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**POTENTIAL SKIN SENSITIZER**

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**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.

## **TOXICOLOGICAL INFORMATION**

Treat symptomatically if ingested or in contact with eyes or skin. If gastric lavage is considered necessary, prevent aspiration of gastric material. Administration of activated charcoal may also be considered.

## **PRECAUTIONS**

**KEEP OUT OF REACH OF CHILDREN.**

Potential skin sensitizer.

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, protective eyewear (goggles or face shield), socks and shoes during mixing, loading, application, clean-up and repair. Gloves are not required during groundbloom application. Wash the outside of the gloves before removing.

Wash splashes from skin and eyes **IMMEDIATELY** with plenty of water. While spraying, wear a long sleeve shirt and long pants. Wear chemical-resistant gloves if contact with spray nozzles is necessary.

Avoid working in spray mist. Avoid all drift or contact with other vegetation. After spraying, wash hands and shower thoroughly with soap and water. While using product, do not eat, drink or smoke. Wash hands and exposed skin with soap and water thoroughly before eating, drinking, smoking, applying cosmetics or using the toilet. Keep product away from food, drink and animal feed. Store product in original container, tightly closed and in a safe place.

**DO NOT** use or store product near heat or open flame. **DO NOT** apply beyond the field boundary.

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

12 hours after application.

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.

Read and follow all tank mix partner labels and observe the most stringent label restrictions, precautions and instructions for each tank mixture.

### **STORAGE**

Always store product in original container with top closed in a cool, dry place. Avoid contamination of seed, feed and foodstuffs. MESTER® 480SC Herbicide can be stored in freezing conditions. If frozen, allow to thaw and agitate thoroughly prior to use.

### **DECONTAMINATION AND DISPOSAL**

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

#### **CONTAINER DISPOSAL:**

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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 reuse this container for any other purpose.

### **GENERAL INFORMATION**

MESTER 480SC Herbicide is a suspension concentrate herbicide that has soil residual activity and provides selective control or suppression of annual broadleaf weeds in corn, MGI tolerant soybeans, and other listed crops. MESTER 480SC Herbicide has a high level of crop safety to allow for flexibility in application timing in corn, MGI tolerant soybeans, and cranberries.

MESTER 480SC Herbicide may be tank mixed with a range of herbicides as part of a one pass broad-spectrum weed control program in corn, and MGI tolerant soybeans.

In post-emergent applications, MESTER 480SC Herbicide is absorbed through the leaves and is rapidly translocated to the plant's growing points.

MESTER 480SC Herbicide may also be tank mixed with a post-emergent grass herbicide for broader spectrum post-emergent weed control in corn.

## ENVIRONMENTAL PRECAUTIONS

Toxic to small wild mammals, aquatic organisms and to non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

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.

## DIRECTIONS FOR USE

### CORN

#### 1.) Pre-emergent Application: (Field Corn, Production Seed Corn and Sweet Corn) – Eastern Canada Only

Apply MESTER 480SC Herbicide at 0.30 L per hectare in a spray volume of 200 L and a minimum pressure of 206 kPa (refer to the “*MIXING AND SPRAYING INSTRUCTIONS*” section of this label).

MESTER 480SC Herbicide will control:

lamb’s-quarters

wild mustard

redroot pigweed common

ragweed (suppression)

velvetleaf

MESTER 480SC Herbicide tank-mixed with DUAL II MAGNUM®, PRIMEXTRA® II MAGNUM, DUAL II MAGNUM plus AATREX® LIQUID 480 will provide broad-spectrum control of annual broadleaf and grass weeds. Consult the tank mix partner label for precautions, use rates and weeds controlled.

### Use Rates for Pre-emergent Application

WEEDS CONTROLLED	RATE/HA MESTER 480SC HERBICIDE	RATE/HA TANK MIX PARTNER <sup>1</sup>
Broadleaf Weeds	0.30 L	
Broadleaf Weeds and Annual Grasses	0.30 L	1.25 – 1.75 L DUAL II MAGNUM
		3.0 – 4.0 L PRIMEXTRA II MAGNUM
		1.25 – 1.75 L DUAL II MAGNUM + 2.1 - 3.1 L AATREX Liquid 480

<sup>1</sup> Consult the label of the product(s) tank mixed with MESTER 480SC Herbicide for specific instructions regarding grass and broadleaf weeds, soil-type variations, and rotational crop, grazing or other restrictions.

**2.) Early Post-emergent Application: (Field Corn only) - Eastern Canada only**

Apply MESTER 480SC Herbicide at 0.30 L per hectare in a spray volume of 200 L and a minimum pressure of 206 kPa (refer to the “*MIXING AND SPRAYING INSTRUCTIONS*” section of this label).

MESTER 480SC Herbicide will control:

- lamb’s-quarters
- wild mustard
- redroot pigweed
- common ragweed (suppression)
- velvetleaf

MESTER 480SC Herbicide tank-mixed with DUAL II MAGNUM, PRIMEXTRA II MAGNUM, DUAL II MAGNUM plus AATREX Liquid 480 will provide broad-spectrum control of annual broadleaf and grass weeds. Consult the tank mix partner labels for precautions, use rates and weeds controlled.

**Use Rates for Early Post-emergence Application  
(Spike to 2 leaf stage of corn and cotyledon to 2 leaf stage of weeds)**

WEEDS CONTROLLED	RATE/HA MESTER 480SC HERBICIDE	RATE/HA TANK MIX PARTNER <sup>1</sup>
Broadleaf Weeds	0.30 L	
Broadleaf Weeds and Annual Grasses	0.30 L	1.25 – 1.75 L DUAL II MAGNUM
		3.0 – 4.0 L PRIMEXTRA II MAGNUM
		1.25 – 1.75 L DUAL II MAGNUM + 2.1 - 3.1 L AATREX Liquid 480

<sup>1</sup> Consult the label of the product(s) tank mixed with MESTER 480SC Herbicide for specific instructions regarding grass and broadleaf weeds, soil-type variations, and rotational crop, grazing or other restrictions.

**3.) Late Post-emergent Application: (Field Corn only) - Eastern Canada only**

Apply MESTER 480SC Herbicide at 0.21 L per hectare in a spray volume of 100-200 L of water and a minimum pressure of 206 kPa (refer to the “*MIXING AND SPRAYING INSTRUCTIONS*” section of this label).

Always add a spray surfactant. Use the non-ionic surfactant AGRAL® 90 at 0.20% v/v. For best results, apply MESTER 480SC Herbicide to actively growing weeds. Weeds that emerge after an application of MESTER 480SC Herbicide will be controlled after they absorb the herbicide from the soil provided there is sufficient moisture for uptake.

MESTER 480SC Herbicide will control:

- eastern black nightshade



redroot pigweed  
 velvetleaf  
 common ragweed (suppression only)  
 (up to the 8 leaf weed stage)

MESTER 480SC Herbicide tank-mixed with AATREX and a glyphosate containing product will provide control of all four weeds listed above plus emerged annual and perennial weeds for use ONLY on glyphosate tolerant corn. MESTER 480SC Herbicide tankmixed with Ultim® or Accent® or Accent + AATREX or Ultim + AATREX will provide broadspectrum control of annual broadleaf and grass weeds. Consult tank mix partner labels for precautions. Consult Ultim and Accent labels for use rates and weeds controlled.

**Use Rates for Post Emergent Application  
 (3 to 8 leaf stage of corn and up to 8 leaf stage of broadleaf weeds)**

<b>WEEDS CONTROLLED</b>	<b>RATE/HA MESTER 480SC HERBICIDE<sup>1</sup></b>	<b>RATE/HA TANK MIX PARTNER<sup>2</sup></b>
Eastern black nightshade, redroot pigweed, velvetleaf, common ragweed (suppression only)	0.21 L	
Eastern black nightshade, redroot pigweed, velvetleaf, common ragweed	0.21 L	0.58 L AATREX Liquid 480
Weeds controlled by MESTER 480SC Herbicide plus weeds controlled by Ultim 75DF	0.21 L	33.7 g Ultim 75DF <sup>3</sup>
Weeds controlled by tank mixture of MESTER 480SC Herbicide + AATREX plus weeds controlled by Ultim 75DF	0.21 L	0.58 L AATREX Liquid 480 + 33.7 g Ultim 75DF <sup>3</sup>
Weeds controlled by MESTER 480SC Herbicide plus weeds controlled by Accent 75DF	0.21 L	33.4 g Accent 75DF
Weeds controlled by tank mixture of MESTER 480SC Herbicide + AATREX plus weeds controlled by Accent 75DF	0.21 L	0.58 L AATREX Liquid 480 + 33.4 g Accent 75DF
Weeds controlled by MESTER 480SC Herbicide plus emerged annual and perennial weeds <b>For use ONLY on glyphosate tolerant corn</b>	0.21 L	2.5 L TOUCHDOWN® iQ4 or 1.8 L TOUCHDOWN TOTAL® <sup>4</sup> or 1.67 L Roundup Weathermax® <sup>4</sup> or 2.5 L Roundup Transorb® <sup>4</sup> or 2.5 L Glyphos® <sup>4</sup> or 2.5 L Credit® Plus <sup>4</sup> or 2.5 L Vantage® <sup>4</sup>

		or 2.5 L Vantage Plus <sup>4</sup> or 2.5 L Renegade <sup>4</sup>
Weeds controlled by tank mixture of MESTER 480SC Herbicide + AATREX plus emerged annual and perennial weeds <b>For use ONLY on glyphosate tolerant corn</b>	0.21 L	0.58 L AATREX Liquid 480 + 2.5 L TOUCHDOWN iQ <sup>4</sup> or 1.8 L TOUCHDOWN TOTAL <sup>4</sup> or 1.67 L Roundup Weathermax <sup>4</sup> or 2.5 L Roundup Transorb <sup>4</sup> or 2.5 L Glyphos <sup>4</sup> or 2.5 L Credit Plus <sup>4</sup> or 2.5 L Vantage <sup>4</sup> or 2.5 L Vantage Plus <sup>4</sup> or 2.5 L Renegade <sup>4</sup>

<sup>1</sup>Add AGRAL 90 at 0.2% v/v.

<sup>2</sup>Consult the label of the product(s) tank mixed with MESTER 480SC Herbicide for specific instructions regarding soil-type variations, and rotational crop, grazing or other restrictions.

<sup>3</sup>Tank mixes containing Ultim can only be applied up to the 6 leaf stage of corn.

<sup>4</sup> Some perennial weeds may not be controlled with these rates of TOUCHDOWN iQ, TOUCHDOWN TOTAL, Roundup Weathermax, Roundup Transorb, Glyphos, Credit Plus, Vantage, Vantage Plus or Renegade Herbicide. Consult the TOUCHDOWN iQ, TOUCHDOWN TOTAL, Roundup Weathermax, Roundup Transorb, Glyphos, Credit Plus, Vantage, Vantage Plus or Renegade herbicide label regarding perennial weeds controlled.

### **MGI TOLERANT SOYBEANS (Eastern Canada Only)**

MESTER 480SC Herbicide can be applied surface pre-plant, pre-emergent or post-emergent (up to first flower (R1 growth stage)) to soybeans that are identified as MGI (mesotrione, glufosinate and isoxaflutole) tolerant. Applications to soybeans that are not MGI tolerant will result in significant crop injury including yield loss or soybean death. For a list of MGI tolerant soybean varieties, contact a Sharda Cropchem Limited Technical Representative.

MESTER 480SC Herbicide can be applied from 7 days prior to planting up through and including R1 growth stage for control of weeds in soybeans.

Under some environmental conditions, post-emergence applications of MESTER 480SC Herbicide can result in temporary crop whitening. When these symptoms occur following application, new soybean growth is unaffected and plants fully recover.

Harvest MGI tolerant soybean seed at normal maturity, DO NOT graze or harvest treated forage or hay for livestock feed.

### **Restrictions:**

1. Apply no more than 0.30 L/ha MESTER 480SC Herbicide per MGI tolerant soybean crop per year. One application per crop year.
2. Do not apply MESTER 480SC Herbicide to more than 140 ha of MGI tolerant soybeans per day.
3. Do not apply MESTER 480SC Herbicide after early flowering (R1 growth stage) of MGI tolerant soybeans.
4. Do not harvest soybeans for at least 45 days following application.

### Surface Pre-plant or Pre-emergent Application

Apply MESTER 480SC Herbicide prior to MGI tolerant soybean emergence at 0.30 L per hectare in a spray volume of 100-200 L of water and a minimum pressure of 206 kPa (refer to the “MIXING AND SPRAYING INSTRUCTIONS” section of this label).

MESTER 480SC Herbicide will control the weeds below (pre-emergence and up to the 2 leaf stage):

lamb’s-quarters  
wild mustard  
redroot pigweed  
common ragweed (suppression)  
velvetleaf

If other annual or perennial weeds are emerged at application, MESTER 480SC Herbicide may be tank mixed with other registered soybean herbicides listed in the table below.

### Use Rates for Surface Pre-plant Application- Up to 7 days prior to planting:

<b>WEEDS CONTROLLED</b>	<b>RATE/HA MESTER 480SC HERBICIDE</b>	<b>RATE/HA TANK MIX PARTNER<sup>1</sup></b>
Broadleaf Weeds	0.30 L	1.15 - 1.75 L DUAL MAGNUM
Broadleaf Weeds and Annual Grasses	0.30 L	1.15 - 1.75 L DUAL II MAGNUM
Broadleaf Weeds plus emerged Annual and Perennial Weeds	0.30 L	1.8 L TOUCHDOWN TOTAL <sup>2</sup> or 1.8 L TRAXION Herbicide <sup>2</sup> or for other glyphosate products, consult the label to deliver the equivalent of 850- 900 g ai/ha
Broadleaf Weeds and Annual Grasses, plus emerged Annual and Perennial Weeds	0.30 L	+ 1.8 L TOUCHDOWN TOTAL <sup>2</sup> or 1.8 L TRAXION <sup>2</sup> + 1.15 – 1.75 L DUAL II MAGNUM

<sup>1</sup> Consult the label of the product(s) tank mixed with MESTER 480SC Herbicide for specific instructions regarding grass and broadleaf weeds, soil-type variations, and rotational crop, grazing or other restrictions.

<sup>2</sup> Some perennial weeds may not be controlled with these rates of TOUCHDOWN, TRAXION or other glyphosate, herbicide. Consult the TOUCHDOWN TOTAL, TRAXION or other glyphosate herbicide label regarding perennial weeds controlled.

### Use Rates for Pre-emergent Application:

<b>WEEDS CONTROLLED</b>	<b>RATE/HA MESTER 480SC HERBICIDE</b>	<b>RATE/HA TANK MIX PARTNER<sup>1</sup></b>
Broadleaf Weeds	0.30 L	
Broadleaf Weeds and Annual Grasses	0.30 L	+ 1.15 - 1.75 L DUAL II MAGNUM

<sup>1</sup> Consult the label of the product(s) tank mixed with MESTER 480SC Herbicide for specific instructions regarding grass and broadleaf weeds, soil-type variations, and rotational crop, grazing or other restrictions.

**Early Post-emergent Application - MGI tolerant soybeans emerged up to second trifoliolate (V2 growth stage) and up to 2-8 leaf stage of broadleaf weeds**

Apply MESTER 480SC Herbicide at 0.30 L per hectare in a spray volume of 100-200 L of water and a minimum pressure of 206 kPa (refer to the “*MIXING AND SPRAYING INSTRUCTIONS*” section of this label).

For best results, apply MESTER 480SC Herbicide to actively growing weeds. Weeds that emerge after an application of MESTER 480SC Herbicide will be controlled after they absorb the herbicide from the soil provided there is sufficient moisture for uptake.

If weeds are beyond the 2 leaf stage then add a spray surfactant. Use the non-ionic surfactant AGRAL® 90 at 0.20% v/v.

MESTER 480SC Herbicide will control the following weeds up to the 8 leaf stage:

- lamb’s-quarters
- wild mustard
- redroot pigweed
- common ragweed (suppression)
- velvetleaf

**Use Rates for Early Post-emergent Application (MGI tolerant soybeans emerged up to second trifoliolate (V2 growth stage) and up to 2-8 leaf stage of broadleaf weeds)**

<b>WEEDS CONTROLLED</b>	<b>RATE/HA MESTER 480SC HERBICIDE<sup>1</sup></b>	<b>RATE/HA TANK MIX PARTNER</b>
Eastern black nightshade, redroot pigweed, velvetleaf, common ragweed (suppression only), lamb’s quarters <sup>3</sup> and wild mustard <sup>3</sup>	0.21 - 0.30 <sup>3</sup> L	
Weeds controlled by MESTER 480SC Herbicide plus emerged annual and perennial weeds <b>For use ONLY on MGI tolerant soybeans</b>	0.21 - 0.30 L	1.5 – 2 L/ha Liberty 200SN <sup>1, 2</sup>

<sup>1</sup> Consult the label of the product(s) tank mixed with MESTER 480SC Herbicide for specific instructions regarding grass and broadleaf weeds, soil-type variations, and rotational crop, grazing or other restrictions.

<sup>2</sup> Application of this tank mix to soybeans that are not glufosinate and mesotrione tolerant will result in severe crop injury or death.

<sup>3</sup> Use the 0.30 L/ha rate to control lamb’s quarters and wild mustard

**Late Post-emergent Application - MGI tolerant soybeans from third trifoliolate (V3) up to first bloom (R1 growth stages) and emerged broadleaf weeds up to 8 leaf stage:**

Apply MESTER 480SC Herbicide at 0.21 L per hectare in a spray volume of 100-200 L of water and a minimum pressure of 206 kPa (refer to the “*MIXING AND SPRAYING INSTRUCTIONS*” section of this label).

Always add a spray surfactant. Use the non-ionic surfactant AGRAL® 90 at 0.20% v/v.

For best results, apply MESTER 480SC Herbicide to actively growing weeds. Weeds that emerge after an application of MESTER 480SC Herbicide will be controlled after they absorb the herbicide from the soil provided there is sufficient moisture for uptake.

MESTER 480SC Herbicide will control the following weeds up to the 8 leaf stage:

eastern black nightshade

redroot pigweed

velvetleaf

common ragweed (suppression only)

**Use Rates for Late Post Emergent Application (MGI tolerant soybeans from third trifoliolate (V3) up to first bloom (R1 growth stages) and emerged broadleaf weeds up to 8 leaf stage)**

<b>WEEDS CONTROLLED</b>	<b>RATE/HA MESTER 480SC HERBICIDE<sup>1</sup></b>	<b>RATE/HA TANK MIX PARTNER<sup>2</sup></b>
Eastern black nightshade, redroot pigweed, velvetleaf, common ragweed (suppression only)	0.21 L	
Weeds controlled by MESTER 480SC Herbicide plus emerged annual and perennial weeds <b>For use ONLY on MGI tolerant soybeans</b>	0.21 L	1.5 – 2 L/ha Liberty® 200SN <sup>1, 3</sup>

<sup>1</sup> Consult the label of the product(s) tank mixed with MESTER 480SC Herbicide for specific instructions regarding grass and broadleaf weeds, soil-type variations, and rotational crop, grazing or other restrictions.

<sup>2</sup> Some perennial weeds may not be controlled with these rates. Consult the Liberty 200SN label regarding perennial weeds controlled.

<sup>3</sup> Application of this tank mix to soybeans that are not glufosinate and mesotrione tolerant will result in severe crop injury or death.

### **MESOTRIONE TOLERANT SOYBEAN (Eastern Canada Only)**

MESTER 480SC Herbicide can be applied surface pre-plant (up to 7 days prior to planting) or post-plant pre-emergence to soybeans that are identified as mesotrione tolerant. Applications to soybeans that are not mesotrione tolerant will result in significant crop injury. Applications to mesotrione tolerant soybeans may result in significant early visual crop injury/bleaching with no adverse effects on maturity or crop yield. For a list of mesotrione tolerant soybean varieties, contact a Sharda Cropchem Limited Technical Representative. Harvest mesotrione tolerant soybean seed at normal maturity, DO NOT graze or harvest treated forage or hay for livestock feed.

**Surface Pre-plant (Up to 7 Days Prior to Planting) or Post-plant Pre-emergent Application:**

Apply MESTER 480SC Herbicide prior to mesotrione tolerant soybean emergence at 0.30 L per hectare in a spray volume of 200 L and a minimum pressure of 206 kPa (refer to the “MIXING AND SPRAYING INSTRUCTIONS” section of this label).

MESTER 480SC Herbicide will control the weeds below (pre-emergence and up to the 2 leaf stage):

lamb’s-quarters  
wild mustard  
redroot pigweed  
common ragweed (suppression)  
velvetleaf

If other annual or perennial weeds are emerged at application, MESTER 480SC Herbicide may be tank mixed with other registered soybean herbicides listed in the table below.

**Restrictions:**

1. Apply no more than 0.30L/ha MESTER 480SC Herbicide per mesotrione tolerant soybean crop per year. One application per crop year.
2. Do not apply MESTER 480SC Herbicide to emerged mesotrione tolerant soybeans.
3. Do not apply MESTER 480SC Herbicide to more than 140 ha of mesotrione tolerant soybeans per day.

**Use Rates for Surface Pre-plant Application Up to 7 Days Prior to Planting:**

<b>WEEDS CONTROLLED</b>	<b>RATE/HA MESTER 480SC HERBICIDE</b>	<b>RATE/HA TANK MIX PARTNER<sup>1</sup></b>
Broadleaf Weeds	0.30 L	1.15 - 1.75 L DUAL MAGNUM
Broadleaf Weeds and Annual Grasses	0.30 L	1.15 - 1.75 L DUAL II MAGNUM
Broadleaf Weeds plus emerged Annual and Perennial Weeds	0.30 L	1.8 L TOUCHDOWN TOTAL <sup>2</sup> or 1.8 L TRAXION Herbicide <sup>2</sup> or for other glyphosate products, consult the label to deliver the equivalent of 850- 900 g ai/ha
Broadleaf Weeds and Annual Grasses, plus emerged Annual and Perennial Weeds	0.30 L	+ 1.8 L TOUCHDOWN TOTAL <sup>2</sup> or 1.8 L TRAXION <sup>2</sup> + 1.15 – 1.75 L DUAL II MAGNUM

<sup>1</sup> Consult the label of the product(s) tank mixed with MESTER 480SC Herbicide for specific instructions regarding grass and broadleaf weeds, soil-type variations, and rotational crop, grazing or other restrictions.

<sup>2</sup> Some perennial weeds may not be controlled with these rates of TOUCHDOWN, TRAXION or other glyphosate, herbicide. Consult the TOUCHDOWN TOTAL, TRAXION or other glyphosate herbicide label regarding perennial weeds controlled.

**Use Rates for Post-plant Pre-emergent Application:**

<b>WEEDS CONTROLLED</b>	<b>RATE/HA MESTER 480SC</b>	<b>RATE/HA</b>
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	<b>HERBICIDE</b>	<b>TANK MIX PARTNER<sup>1</sup></b>
Broadleaf Weeds	0.30 L	
Broadleaf Weeds and Annual Grasses	0.30 L	+ 1.15 - 1.75 L DUAL II MAGNUM

<sup>1</sup> Consult the label of the product(s) tank mixed with MESTER 480SC Herbicide for specific instructions regarding grass and broadleaf weeds, soil-type variations, and rotational crop, grazing or other restrictions.

### **Pre-Harvest Intervals**

Crops	PHI (days)
Field corn grain/stover	100
Field corn forage	45
Sweet corn	50
Soybeans	45

### **USE PRECAUTIONS:**

MESTER 480SC Herbicide may be used pre-emergent on field corn, production seed corn, sweet corn and mesotrione tolerant soybeans. Post-emergent applications may be made on Field Corn only. Not all seed corn inbreds, sweet corn varieties, and Mesotrione tolerant soybean varieties have been tested; the use of MESTER 480SC Herbicide must be approved by the seed company and comply with the directions given by the seed company (corn and/or Mesotrione tolerant soybean).

Although MESTER 480SC Herbicide has a flexible recropping profile, certain crops may be sensitive to low concentrations in the soil. Therefore, careful consideration should be given to crop rotation plans prior to using MESTER 480SC Herbicide (refer to "*RECROPPING GUIDELINES*").

Dry conditions following application may reduce the pre-emergent activity of MESTER 480SC Herbicide. If an activating rain (12 mm) is not received within 7-10 days after a pre-emergent application, rotary hoeing is suggested to activate the herbicide.

Do not apply to soils that contain less than 1% or more than 10% organic matter.

When applied post emergent, thorough coverage of emerged weeds is essential for effective control with MESTER 480SC Herbicide. Although weed competition is quickly halted, visual symptoms of dying weeds (discolouration) may take up to 2 weeks to appear depending on the weed species and growing conditions.

Optimum control of emerged weeds will be obtained when weeds are actively growing. Under unfavourable conditions, such as drought, heat, flooding, prolonged cool temperatures or insufficient fertility, adequate control may not be achieved and re-growth may occur.

Temporary crop injury (bleaching) may occur under extreme weather conditions or when the crop is under stress due to inadequate or abnormally high moisture levels or extreme temperatures. The symptoms are most visible where excessive rates have been applied, such as sprayer overlaps. Corn and mesotrione tolerant soybeans quickly outgrow these effects and continues to grow normally.

Do not make a foliar post-emergent application of any organophosphate or carbamate insecticide within 7 days before or 7 days after a MESTER 480SC Herbicide application or severe injury may occur to either corn or mesotrione tolerant soybeans. Sharda Crop Limited will not be held responsible for losses or damage resulting from such use.

Severe injury and crop yield loss may occur if MESTER 480SC Herbicide is applied to crops that are treated with Lorsban™.

MESTER 480SC Herbicide may be applied prior to or following a pyrethroid-type insecticide such as FORCE® Insecticide or MATADOR® 120EC Insecticide.

Do not cultivate corn within 7 days before or after a post-emergent MESTER 480SC Herbicide application.

Make only one application of MESTER 480SC Herbicide per year.

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.

**MIXING AND SPRAYING INSTRUCTIONS:**

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

**DO NOT** apply by air.

**Buffer zones:**

Spot treatments using hand-held equipment **DO NOT** require a buffer zone.

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

Method of application	Crop	Buffer zone (metres) required for the protection of:	
		Aquatic habitat	Terrestrial habitat
Field sprayer*	Field corn, seed and sweet corn, mesotrione tolerant soybeans, MGI tolerant soybeans, flax, asparagus (established), rhubarb, pearl millet, sorghum, highbush and lowbush blueberry, and turf	1	4
	Cranberry	1	10

\*For field sprayer application, buffer zones can be reduced with the use of drift reducing spray shields.

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



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

#### **APPLICATION IN LIQUID FERTILIZERS:**

Nitrogen solutions (such as 28-0-0 UAN), excluding suspension fertilizers, may replace water as a carrier for pre-emergence application in corn. Do not use nitrogen solutions as a carrier to corn that has emerged. Constant agitation is necessary to maintain a uniform mixture during application.

#### **GROUND APPLICATION ONLY:**

##### **Water Volume:**

Apply in 100 – 200 litres per hectare.

##### **Spray Pressure:**

206 – 300 kPa

##### **Spray Nozzles:**

Flat Fan with 50 mesh or larger screens. For uniform coverage and increased penetration of the crop canopy, set the nozzles at a downward angle of 90 degrees (90°).

##### **Surfactant:**

Post-emergent applications of MESTER 480SC Herbicide must be applied with the non-ionic surfactant AGRAL 90 at 0.2% v/v (2.0 L for each 1000 L of spray mixture).

#### **Mixing Procedure:**

1. Ensure that the sprayer is totally clean.
2. Fill the sprayer half full with water. Engage gentle agitation.
3. Ensure that the agitation system is working properly and that it creates a rippling or rolling action on the water surface.
4. If required, add Ultim or Accent slowly and agitate until completely dispersed.
5. Add MESTER 480SC Herbicide and PRIMEXTRA II MAGNUM or AATREX Liquid 480 herbicide (if an applicable tank-mix) slowly and agitate until completely dispersed. To ensure complete dispersion, wait 2 or 3 minutes after the last of the herbicide has been added to the tank.
6. Fill the tank to three quarters full with water.
7. Add DUAL II MAGNUM if required.
8. Add TOUCHDOWN iQ Liquid, TOUCHDOWN TOTAL, Roundup Weathermax, Roundup Original, Roundup Transorb, Glyphos, Credit Plus, Vantage, Vantage Plus, or Renegade if required. Refer to the label of the tank mix partner and the surfactant for the specific mixing instructions.
9. Add the non-ionic surfactant if applicable (e.g., AGRAL 90) at 0.2% v/v.
10. Continue agitation while completing the filling of the sprayer with water.
11. Always ensure that agitation is maintained until spraying is completed, even if stopped for brief periods of time.
12. If agitation is stopped for more than 5 minutes, re-suspend the spray solution by running on full agitation prior to spraying. **MESTER 480SC Herbicide must be sprayed the same day as mixing.**

13. Do not mix, load or clean spray equipment where there is a potential to contaminate wells or aquatic systems.

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

The DIRECTIONS FOR USE for this product for the uses described below were developed by persons other than Sharda Cropchem Limited and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Sharda Cropchem Limited 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 assumes all risks related to performance and crop tolerance arising, and agree to hold Sharda Cropchem Limited harmless from any claims based on efficacy and/or phytotoxicity in connection with the uses described below.

**FIELD CORN (EASTERN CANADA ONLY)**

<b>TIMING<sup>1</sup></b>	<b>Weeds Controlled</b>	<b>RATE/HA MESTER 480SC HERBICIDE</b>	<b>RATE<sup>2</sup>/HA TANK MIX PARTNER</b>	<b>REMARKS</b>
Pre-emergent	Tall Waterhemp	0.30 L	3 – 4 L PRIMEXTRA II MAGNUM <sup>3</sup> in 200 L carrier/ha	Make only one application per year. Apply by ground equipment only.
Post-emergent <sup>4</sup>	Volunteer Adzuki Bean ( <i>Vigna angularis</i> ), large crabgrass ( <i>Digitaria sanguinalis</i> ), Giant Ragweed <sup>5</sup> and Tall Waterhemp, Common Cocklebur <sup>5</sup>	0.21 L	0.58 L AATREX Liquid 480 Herbicide + 0.2% v/v AGRAL 90 in 100 - 200 L water/ha	Make only one application per year. Apply by ground equipment only.

<sup>1</sup> Apply at 3-8 leaf stage of corn.

<sup>2</sup> Consult tank mix partner label for precautions.

<sup>3</sup> Use higher rate of PRIMEXTRA II MAGNUM Herbicide for heavier weed problems.

<sup>4</sup> Apply at the unifoliate to trifoliate leaf stage of adzuki bean, at the 1-6 leaf stage of large crabgrass, when giant ragweed is at the cotyledon-10 leaf stage and up to the 8 leaf stage of Tall Waterhemp and when common cocklebur is up to the cotyledon – 6 leaf stage.

<sup>5</sup> Suppression only.

**SEED AND SWEET CORN (EASTERN CANADA AND BRITISH COLUMBIA ONLY)**

<b>TIMING</b>	<b>RATE/HA MESTER 480SC HERBICIDE</b>	<b>RATE<sup>1</sup>/HA TANK MIX PARTNER</b>	<b>REMARKS</b>
Postemergent <sup>2</sup>	0.21 L	0.2% v/v AGRAL 90	<p>Make only one application per year. Apply in 100-200 L water/ha at 205-300 kPa.</p> <p><b>DO NOT APPLY BY AIR.</b></p> <p>Do not harvest sweet corn treated with MESTER 480SC Herbicide within 50 days of treatment. Harvest seed corn at the normal interval.</p> <p>Seed corn inbreds and sweet corn varieties may vary in their tolerance to herbicides, including MESTER 480SC Herbicide. Since not all seed corn inbreds or sweet corn varieties have been tested for tolerance to MESTER 480SC Herbicide, first use of MESTER 480SC 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 seed corn inbreds to MESTER 480SC Herbicide.</p> <p>Do NOT apply on Delmonte 2038 as unacceptable crop injury will occur. DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.</p>

<sup>1</sup>Consult tank mix partner label for precautions.

<sup>2</sup> Late post-emergence (3-6 leaf stage).

**ESTABLISHED CRANBERRY BEDS**

<b>TIMING</b>	<b>RATE/HA MESTER 480SC HERBICIDE</b>	<b>WEEDS CONTROLLED</b>	<b>REMARKS</b>
Preemergent <sup>1</sup> and early postemergent	0.30 L	lamb's-quarters, redroot pigweed, velvetleaf, wild mustard, common ragweed <sup>2</sup> , vetch <sup>2</sup> and creeping buttercup <sup>2</sup>	Make only one application per year. Apply in 200 L water/ha for pre- emergence application and in 100 - 200 L water/ha at 206 - 300 kPa for post-emergence application. DO NOT APPLY BY AIR. DO NOT apply by hand.
OR			Use only ground boom equipment when applying this product.
Late post emergent <sup>3</sup>	0.21 L <sup>4</sup>	Eastern black nightshade, redroot pigweed, velvetleaf, common ragweed <sup>2</sup> , vetch <sup>2</sup> and creeping buttercup <sup>2</sup>	Do not apply MESTER 480SC Herbicide through any type of irrigation equipment. Bearing Beds – Apply between bud break and fruit set. Do not harvest within 60 days of treatment. Non-Bearing Beds – Apply between bud break and 60 days prior to fall or winter flooding. Do not harvest within 365 days of treatment. Do not flood within 60 days of treatment. Do not apply directly to water or areas where surface water is present. Do not spray to runoff. Do not apply if rainfall or sprinkler irrigation for frost protection is expected within 48 hours. Wait at least 18 months after the last MESTER 480SC Herbicide application in cranberries before replanting cranberries. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.
OR			

Post emergent to the weeds <sup>3</sup>	2 applications of 0.21 L <sup>4</sup>	Weeds controlled with a single application of 0.21 L plus cinquefoil ( <i>Potentilla</i> spp.) <sup>2</sup> , goldenrod, rushes ( <i>Juncus Canadensis</i> , <i>J. effuses</i> , <i>J. bufonlus</i> , <i>J. tenuis</i> ) <sup>2</sup> , and sedges ( <i>Carex</i> spp.) <sup>2</sup>	Maximum 2 applications per year Allow for a minimum of 14 days between applications.
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<sup>1</sup>Up to the 2 leaf weed stage.

<sup>2</sup>Suppression only.

<sup>3</sup>3 to 8 leaf weed stage.

<sup>4</sup>Add AGRAL 90 at 0.2% v/v.

### ASPARAGUS (ESTABLISHED)

TIMING	RATE/HA MESTER 480SC HERBICIDE	WEEDS CONTROLLED	REMARKS
Preemergent To asparagus (established)	0.30 L	Lamb's-quarters, redroot pigweed, velvetleaf, wild mustard, common ragweed (suppression only)	<p>Can be applied by broadcast or banded application.</p> <p>For banded applications, the application must be made to account for band width (i.e. to deliver desired rate per hectare).</p> <p>Apply after fern mowing, disking, or other tillage operation but prior to spear emergence.</p> <p>Apply in 100 – 200 L/ha of water at 206 – 300 kPa.</p> <p>Make only 1 application per season.</p> <p>If weeds are emerged at the time of MESTER 480SC Herbicide application, the addition of AGRAL 90 at the rate of 0.2% v/v is recommended. If weeds have not emerged, no adjuvant is recommended.</p> <p>Use of MESTER 480SC Herbicide on asparagus (established) may cause bleaching and may even lead to yield reduction.</p> <p>DO NOT apply by air.</p> <p>Do not enter or allow worker entry into treated area during the restricted entry interval (REI) of 12</p>

			hours.
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### HIGHBUSH BLUEBERRY (BEARING AND NON-BEARING YEARS)

TIMING	RATE/HA MESTER 480SC HERBICIDE	WEEDS CONTROLLED	REMARKS
Pre-emergent to weeds <sup>1</sup>	0.30 L/ha	Lamb's-quarters, redroot pigweed, velvetleaf, wild mustard, common ragweed <sup>4</sup>	Make only one application per year. Apply MESTER 480SC Herbicide up to 8 leaf stage to weeds and prebloom to crop Apply broadcast (directed spray to the base of the plant) ground application Apply in 100-200 L/ha water at 206-300 kPa. DO NOT APPLY BY AIR.
OR			
Post emergent to weeds <sup>2</sup>	0.30 L/ha <sup>3</sup>	Eastern black nightshade, velvetleaf, redroot pigweed, common ragweed <sup>4</sup>	

<sup>1</sup> up to 2 leaf weed stage

<sup>2</sup> 3 to 8 leaf weed stage

<sup>3</sup> AGRAL 90 at 0.2% v/v

<sup>4</sup> Suppression

### LOWBUSH BLUEBERRY (BEARING AND NON-BEARING YEARS)

TIMING	RATE/HA MESTER 480SC HERBICIDE	WEEDS CONTROLLED	REMARKS
Pre-emergent to weeds <sup>1</sup>	0.30 L/ha	Lamb's-quarters, redroot pigweed, velvetleaf, wild mustard, common ragweed <sup>4</sup>	Make only one application per year. Apply MESTER 480SC Herbicide up to 8 leaf stage to weeds. Do not harvest crop within 60 days of application. Apply broadcast (over the top of the blueberries) ground application. Apply in 100-200 L/ha water at 206-300 kPa. DO NOT APPLY BY AIR.
OR			
Post emergent to weeds <sup>2</sup>	0.30 L/ha <sup>3</sup>	Eastern black nightshade, velvetleaf, redroot pigweed, common ragweed <sup>4</sup>	

<sup>1</sup> up to 2 leaf weed stage

<sup>2</sup> 3 to 8 leaf weed stage

<sup>3</sup> AGRAL 90 at 0.2% v/v

<sup>4</sup> Suppression

**SOD (PRODUCTION ONLY):**

<b>TIMING</b>	<b>RATE/HA MESTER 480SC HERBICIDE</b>	<b>WEEDS CONTROLLED</b>	<b>REMARKS</b>
Pre-emergent to weeds <sup>1</sup>	0.30 L/ha	Lamb's-quarters, redroot pigweed, velvetleaf, wild mustard, common ragweed <sup>4</sup>	<p>Make only one application per year. Apply MESTER 480SC Herbicide pre-emergence to weeds in established sod OR prior to, or post-seeding and prior to emergence of weeds OR post-emergence to weeds (regardless of whether prior to, or post-seeding) Cool-season turf species and varieties may vary in their tolerance to herbicides, including MESTER 480SC Herbicide.</p> <p>Since not all cool-season turf varieties have been tested for tolerance to MESTER 480SC Herbicide, first use of MESTER 480SC Herbicide should be limited to a small area of each variety or mixture to confirm tolerance prior to adoption as a general field practice. Additionally, consult your seed supplier for information on the tolerance of specific cool-season turf varieties to MESTER 480SC Herbicide. Do not apply MESTER 480SC Herbicide to creeping bentgrass.</p> <p>Apply in 250 L/ha of water.</p> <p>Make application close to anticipated weed seed germination.</p> <p>Apply at grass seeding or close to seeding for best performance. Weed control is most effective on young, actively growing weeds.</p> <p>Avoid spraying on newly germinated turfgrass plants. Efficacy will be reduced under moisture stress or from applications to mature weeds.</p> <p>MESTER 480SC Herbicide may reduce density of fine fescue seedings. MESTER 480SC Herbicide can be used on grass seed blends that contain less than 20% by weight of hard or fine fescue.</p> <p>Wait until the newly germinated turf has been mowed two times or four weeks after emergence (whichever is longer) before making a post-</p>
OR			
Post emergent to weeds <sup>2</sup>	0.21 L/ha <sup>3</sup>	Eastern black nightshade, velvetleaf, redroot pigweed, common ragweed <sup>4</sup>	

		<p>emergence application.  <b>DO NOT APPLY BY AIR. DO NOT</b> apply by hand.          Use only ground boom equipment when applying this product.          Do not apply MESTER 480SC Herbicide through any type of irrigation equipment.          Do not apply directly to water or areas where surface water is present. Do not spray to runoff.</p>
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<sup>1</sup> up to 2 leaf weed stage

<sup>2</sup> 3 to 8 leaf weed stage

<sup>3</sup> AGRAL 90 at 0.2% v/v

<sup>4</sup> Suppression

**FLAX – EASTERN CANADA ONLY**

<b>TIMING</b>	<b>RATE/HA MESTER 480SC HERBICIDE</b>	<b>WEEDS CONTROLLED</b>	<b>REMARKS</b>
Pre-emergent to flax and weeds	0.30 L	Lamb's-quarters, redroot pigweed, velvetleaf, wild mustard, common ragweed <sup>1</sup>	<p>Make only one application of MESTER 480SC Herbicide per year. Apply in 200 L water and a minimum pressure of 206 kPa            Apply by ground equipment only.  <b>DO NOT APPLY BY AIR.</b>            Applications of MESTER 480SC Herbicide to emerged flax can result in severe crop injury.            Do not graze treated immature crops or cut for forage or hay.</p>

<sup>1</sup> Suppression only

**PEARL MILLET – EASTERN CANADA ONLY**

<b>TIMING</b>	<b>RATE/HA MESTER 480SC HERBICIDE</b>	<b>WEEDS CONTROLLED</b>	<b>REMARKS</b>
Pre-plant	0.30 L	Lamb's-quarters, redroot pigweed, velvetleaf, wild mustard, common ragweed <sup>1</sup>	<p>Make only one application per year.            Apply in 100-200 L water/ha at 205-300 kPa.  <b>DO NOT APPLY BY AIR.</b>            Do not apply to pearl millet grown in coarse textured soils.            Do not apply more than 0.30</p>



			L/ha per crop <b>or</b> per year. Apply 7-14 days before planting pearl millet. Apply at up to the 2-leaf stage of weeds <b>Application to emerged pearl millet can result in severe crop injury.</b>
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<sup>1</sup> Suppression only

#### **SORGHUM – EASTERN CANADA ONLY**

<b>TIMING</b>	<b>RATE/HA MESTER 480SC HERBICIDE</b>	<b>WEEDS CONTROLLED</b>	<b>REMARKS</b>
Pre-plant	0.30 L	Lamb's-quarters, redroot pigweed, velvetleaf, wild mustard, common ragweed <sup>1</sup>	Make only one application per year. Apply in 100-200 L water/ha at 205-300 kPa. <b>DO NOT APPLY BY AIR.</b> Do not apply to sorghum grown in course textured soils nor to sudangrass, or sorghum-sudangrass hybrids. Do not apply more than 0.30 L/ha per crop <b>or</b> per year. Apply 7-14 days before planting sorghum. Apply at up to the 2-leaf stage of weeds. <b>Application to emerged sorghum can result in severe crop injury.</b>

<sup>1</sup> Suppression only

#### **RHUBARB (ESTABLISHED)**

<b>TIMING</b>	<b>RATE/HA MESTER 480SC HERBICIDE</b>	<b>WEEDS CONTROLLED</b>	<b>REMARKS</b>
Preemergent To crop, preemergent Up to 2-leaf stage of weeds	0.30 L	Lamb's-quarters, redroot pigweed, velvetleaf, wild mustard, common ragweed <sup>1</sup>	Make only one application per year. Do not harvest within 42 days of application. Apply in 200 L/ha water at 206-300 kPa.

			<p>DO NOT APPLY BY AIR.  CAUTION: Apply to dormant (prior to spring greenup) rhubarb.  Applications of MESTER 480SC Herbicide to rhubarb that is not dormant will result in crop injury.  Rainfall or irrigation after the MESTER 480SC Herbicide application may increase the risk of injury to emerging rhubarb.  Repeated use of MESTER 480SC Herbicide in low pH soils may cause injury to rhubarb plants. Wait at least 18 months after the last MESTER 480SC Herbicide application in rhubarb before replanting rhubarb.</p>
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<sup>1</sup> Suppression only

### RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, MESTER 480SC Herbicide is a Group 27 herbicide. Any weed population may contain or develop plants naturally resistant to MESTER 480SC Herbicide and other Group 27 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 MESTER 480SC Herbicide or other Group 27 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 1-888-760-0187.

### **RECROPPING GUIDELINES:**

Certain crops have been shown to be sensitive to low residues of MESTER 480SC Herbicide in the soil. The minimum recropping interval is the time between the last application of MESTER 480SC Herbicide and the anticipated date of planting of the next crop.

To avoid injury to subsequent crops after an application at the recommended rate of MESTER 480SC Herbicide, the following recropping intervals should be observed.

CROP	MINIMAL RECROPPING INTERVAL
Winter Wheat	3 months
Spring Wheat, Field Corn (grain or silage), Seed Corn, Sweet, Corn	10 months
Alfalfa, Potato, Soybeans, Transplanted Tomato, White Beans	11 months
All Other Crops	Bioassay

Observe the recropping guidelines of any product(s) to be tank mixed with MESTER 480SC Herbicide.

In the event of crop failure, only field corn (grain or silage), seed corn, or sweet corn can be planted as a salvage crop in the same fields in which the failed crop was treated with MESTER 480SC Herbicide. An application of MESTER 480SC Herbicide must NOT be made to the salvage crop.

Land treated with MESTER 480SC Herbicide CAN ONLY BE PLANTED TO A CROP NOT LISTED IN THE PREVIOUS TABLE if a field bioassay can be successfully performed. The bioassay must indicate normal growth with no yield reductions.

A bioassay may be conducted in any year following the year of application to assess the tolerance of the tested crop intended for planting in the year following the bioassay. Do not conduct a bioassay in the year of application. When conducting a field bioassay, it is very important to select a representative area(s) of the field previously treated with MESTER 480SC Herbicide to plant the test crop(s).

### **FIELD BIOASSAY**

#### **1. Representative Sample:**

Ensure that soil parameters such as soil texture, depth of topsoil layer, soil pH and drainage of the test area selected are representative of the remainder of the field.

## **2. Sample Size:**

The seeded area of each selected bioassay crop must be large enough to ensure that reliable results are obtained. The seedbed preparations and seeding of the bioassay crop(s) should be conducted the same way as when the entire field would be planted.

## **3. Other Residual Herbicides:**

It is important that other herbicide products which are known to have residual activity were not applied to the field between the last application of MESTER 480SC Herbicide and the bioassay testing period. Avoid the use of other pesticides during the duration of the bioassay as they may damage the indicator crop(s).

## **4. Comparisons:**

Ideally, an untreated check strip in a neighbouring field should be established and monitored for comparison since growing conditions can vary greatly from year to year and may result in erroneous results.

## **5. Assessment:**

The site should be monitored regularly throughout the growing season. Watch for any damage to the crop such as thinning, yellowing or stunting. A yield sample should be taken and compared to an adjacent untreated field.

***DO NOT ROTATE TO OTHER CROPS UNTIL THE BIOASSAY INDICATES NORMAL GROWTH WITH NO YIELD REDUCTIONS.***

***Failure to follow these recropping guidelines could result in injury to seeded crop(s).***

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.

## **SPRAYER CLEANUP:**

To avoid subsequent injury to other crops, thoroughly clean application equipment immediately after spraying. Ensure that all traces of the product are removed. The following procedures are recommended:

1. Drain and flush tank, boom and all hoses for several minutes with clean water containing a household detergent. **Do not** clean the sprayer near desirable vegetation, wells or other water sources.
2. Fill the sprayer tank with clean water and add one litre of household ammonia (containing 3% ammonia) per 100 litres of water. Allow the solution to agitate for 15 minutes prior to flushing the solution through the boom and nozzles. Drain the system.
3. Remove the nozzles and screens and wash separately in a bucket containing the ammonia solution.
4. Thoroughly rinse the tank, hoses, booms, nozzles and screens with clean water for a minimum of 5 minutes to remove all traces of ammonia.
5. Dispose of all rinsings in accordance with provincial regulations.

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