# GROUP 5 HERBICIDE

# AATREX<sup>®</sup> LIQUID 480

HERBICIDE

AGRICULTURAL

Liquid herbicide for selective weed control in corn, sorghum and switchgrass

#### **GUARANTEE:**

Contains 1,2-benzisothiazolin-3-one at 0.019% as a preservative.

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

# **CAUTION: EYE IRRITANT**

REGISTRATION NO.: **18450** PEST CONTROL PRODUCTS ACT

**Syngenta Canada Inc.** 140 Research Lane, Research Park Guelph, Ontario N1G 4Z3 Telephone: 1-877-964-3682

BOOKLET

## 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

**IF POISONING IS SUSPECTED,** call 1-800-327-8633 (FASTMED), 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. When large amounts have been ingested, gastric lavage may be required.

#### PRECAUTIONS

#### KEEP OUT OF THE REACH OF CHILDREN.

Harmful if swallowed. May cause eye irritation. Avoid contact with eyes or prolonged contact with skin. Avoid inhalation of vapours or spray mist. Wear freshly laundered clothes daily. During mixing and loading and otherwise handling the concentrate, wear a face shield in addition to chemical-resistant gloves, coveralls over a long-sleeved shirt and long pants, and shoes and socks. Wash the outside of the gloves before removing. Wash splashes from skin and eyes IMMEDIATELY with plenty of water. During application, cleanup and repair activities, wear chemical-resistant gloves and coveralls over a long-sleeved shirt and long pants, and shoes and socks. 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 use tobacco (including smoking). Wash hands and exposed skin with soap and water

thoroughly before eating, drinking, smoking, applying cosmetics or using the toilet. Store and wash all protective clothing separately from household laundry. Do not wear contaminated shoes. Wash in detergent and hot water before reuse. Keep product away from food, drink and animal feed. Store product in original container, tightly closed, and in a safe place. Mixing and loading is not permitted within 30 m from aquatic habitats.

#### ENVIRONMENTAL HAZARDS

Toxic to non-target terrestrial plants and aquatic organisms. Observe the buffer zones and precautionary measures specified under DIRECTIONS FOR USE. USE ONLY ON LABELLED CROPS.

To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to: heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. soils that are compacted, fine textured or low in organic matter such as clay). Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip (buffer zone) between the treated area and the edge of the water body.

The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (e.g., sand, loamy sand and sandy loam soils) and/or the depth to the water table is shallow.

Avoid applying this product when heavy rain is forecast.

Atrazine is persistent and will carry over. It is recommended that any products containing atrazine not be used in areas treated with this product during the previous season.

# SPRAY DRIFT MANAGEMENT FOR GROUND APPLICATIONS

#### **GENERAL INFORMATION**

Use good pesticide practices and apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools and parks is minimal. Take into consideration wind speed, wind direction, temperature, application equipment and sprayer settings used for application.

For the protection of non-target habitats, over-spray or drift to any body of water or other environmentally sensitive habitat must be avoided. The interaction of equipment and weatherrelated factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

#### **GROUND APPLICATION**

Do not apply AATREX<sup>®</sup> Liquid 480 Herbicide at rates greater than 3.1 L/ha. Apply atrazine at a maximum of 1.5 kg a.i./ha per year either as a pre- or post-emergent application before corn reaches 30 cm in height. Treatments can be made once or twice per year, but the maximum amount of atrazine used in a year cannot exceed 1.5 kg a.i./ha. Atrazine may be applied alone or as a registered tank mix partner. Refer to the tank mix partners for further instructions.

#### **DO NOT** APPLY BY AIR.

**DO NOT** apply during periods of dead calm or when winds are gusty.

**DO NOT** overspray non-target terrestrial or aquatic habitats.

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

STORE IN A DRY PLACE.

Bulk sites must be diked around and under the bulk tank with an impermeable non-earthen dike. The dike must be large enough to hold and contain 110 percent of the capacity of the largest tank.

CAUTION: Do not graze treated immature crops or cut for fodder. In the case of corn, immature means before ear emergence. Sufficient data are not available to support such use. Do not harvest within 45 days of application on sweet corn and 60 days for field corn.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's website at <u>www.croplife.ca</u>.

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

# IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING, CALL 1-800-327-8633 (FASTMED)

#### DIRECTIONS FOR USE

#### **GENERAL INFORMATION**

AATREX Liquid 480 Herbicide provides selective control of broadleaf weeds and wild oats in corn. This product may be applied before or after weeds emerge.

Do NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes. Do NOT apply during periods of dead calm or when winds are gusty. Do not apply this product through any type of irrigation system.

When a tank mixture is used, 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.

DO NOT APPLY BY AIR

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

#### WEEDS CONTROLLED:

Wormseed Mustard Wild Mustard Common Purslane Ragweed Smartweed Lady's-Thumb Wild Buckwheat Lamb's-Quarters Redroot Pigweed Volunteer Clover Wild Oats

NOTE: Some naturally occurring triazine tolerant biotypes of the above listed broadleaf weeds may not be controlled by atrazine alone. Refer to specific recommendations in the tank-mix section of this label or consult your local agricultural authority.

#### TIMING OF APPLICATION:

Can be applied:

- Pre-plant incorporated (PPI)
- Pre-emergence
- Post-emergence

in either conventional tillage or minimum tillage programs.

If weeds escape a PPI or pre-emergence application, an additional post-emergence application may be necessary. Do not make more than one re-application per year and only in the spring.

#### LIQUID FERTILIZERS (CORN):

For pre-plant incorporated and pre-emergence application, nitrogen solutions or complete liquid fertilizers may replace the water as a carrier.

**CAUTION:** Do not apply after the corn has emerged as there is danger of liquid fertilizer causing crop injury. If there is any doubt about compatibility, check by mixing a small amount of AATREX Liquid 480 Herbicide with the liquid fertilizer.

# DRY BULK GRANULAR FERTILIZERS:

Many dry bulk granular fertilizers may be impregnated with AATREX Liquid 480 Herbicide or AATREX Liquid 480 Herbicide plus DUAL<sup>™</sup> Magnum<sup>®</sup> or DUAL II Magnum<sup>®</sup> or Eradicane<sup>®</sup> 8E Herbicide as a preplant incorporated application to control weeds in corn.

For workers incorporating atrazine into dry bulk fertilizers, the following conditions must be met:

- The activity is restricted to commercial facilities (prohibit on-farm impregnation).
- The facilities must employ a closed mix/load system.
- A maximum of 1500 kg active ingredient can be incorporated per day.
- This activity must occur for no more than 30 days per year.

Prepare the herbicide/fertilizer mixtures by using a closed mix/load system. Spray the herbicide(s) uniformly onto the 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 AATREX Liquid 480 Herbicide, AATREX Liquid 480 Herbicide plus DUAL Magnum Herbicide or DUAL II Magnum Herbicide or AATREX Liquid 480 Herbicide plus Eradicane 8-E Herbicide/fertilizer mixtures uniformly to the soil with properly calibrated equipment immediately after blending and incorporate according to label directions.

<u>NOTE</u>: Apply a minimum of 225 kg per hectare of dry granular fertilizer impregnated with recommended rates of herbicide. Do not impregnate AATREX Liquid 480 Herbicide, AATREX Liquid 480 Herbicide plus DUAL Magnum Herbicide or DUAL II Magnum Herbicide or AATREX Liquid 480 Herbicide plus Eradicane 8-E Herbicide onto nitrate fertilizers, super phosphates or limestone.

Do not use AATREX Liquid 480 Herbicide plus Eradicane 8E on corn seed stock.

# AATREX LIQUID 480 HERBICIDE IN OIL-WATER EMULSIONS (POST-EMERGENT TREATMENT):

The post-emergent activity of AATREX Liquid 480 Herbicide is increased when applied in an oilwater emulsion. This combination produces satisfactory control of seedling broadleaf weeds up to 10 cm high. Always apply AATREX Liquid 480 Herbicide before the corn reaches 30 cm in height in order to favour degradation during the growing season. The combination of AATREX Liquid 480 Herbicide in oil-water emulsions has been particularly useful following periods of hot, dry weather, when weeds are more difficult to kill.

NOTE: Some injury to corn can occur with AATREX Liquid 480 Herbicide applied in oil-water emulsions, especially during cold, backward weather. There is no risk of corn injury when AATREX Liquid 480 Herbicide is applied in water alone. Do not add hormone-type weed killers such as 2,4-D, 2,4-DB, MCPA, MCPB and dicamba, or other herbicides, to combinations of oil-water emulsions and AATREX Liquid 480 Herbicide. The risk of damage to other vegetation from spray drift is increased with the use of AATREX Liquid 480 Herbicide in an oil-water emulsion.

# MIXING AND SPRAYING INSTRUCTIONS:

Protect sprayer operators from drift or mist. Additional information on spray drift management

for GROUND APPLICATION is provided in the section "SPRAY DRIFT MANAGEMENT FOR GROUND APPLICATIONS". When low volumes of spray are applied, complete coverage and thorough application are essential for most effective results. Schedule applications in accordance with local conditions. Consult your local agricultural authorities for specific use information. Where possible, use a nurse tank to fill your spray tank.

#### Mixing Steps:

- 1. Spray equipment should be thoroughly flushed with clean water before mixing AATREX Liquid 480 Herbicide.
- 2. Fill spray tank 1/2 full with carrier. Engage gentle agitation.
- 3. Pour in the required amount of wettable powder or wettable granule, if applicable.
- 4. Fill tank 3/4 full and add the AATREX Liquid 480 Herbicide and other liquid products, if applicable.
- 5. Fill tank 9/10 full and add emulsifiable concentrate, liquid solutions or emulsifiable oils, as required. If adding emulsifiable oils, avoid excessive agitation to prevent mixture from forming a grease-like mass and settling out.
- 6. Finish filling tank. Maintain gentle agitation during mixing and spraying operations.
- 7. Do not let stand without agitation.
- 8. When using a mixture of AATREX Liquid 480 Herbicide and emulsifiable oil, clean tank immediately after use with a strong detergent and clean water.
  - Spray pressure 200 300 kPa
  - Spray volume minimum 150 litres per hectare
  - Use 16-mesh suction screen. 50 mesh screens elsewhere on sprayer.

# **APPLICATION INFORMATION - CORN**

# FOR AATREX LIQUID 480 HERBICIDE ALONE, PPI AND PRE-EMERGENCE TREATMENTS

SOIL TYPE	RATE OF APPLICATION/HA	
, , , , , , , , , , , , , , , , , , ,	2.1 - 3.0 <sup>1</sup> L AATREX Liquid 480 Herbicide 3.1 L AATREX Liquid 480 Herbicide	
1 Los higher rete for heavy wood infectations		

Use higher rate for heavy weed infestations.

Rainfall is required within 10 days or a shallow cultivation will be necessary.

AATREX Liquid 480 Herbicide may be applied as an overall spray or as a band application. USE PROPORTIONATELY LESS PRODUCT FOR BAND APPLICATION.

# PREPLANT INCORPORATED TANK MIXES (Silage, Field, Sweet Corn)

WEEDS CONTROLLED	PRODUCT RATES				
Broadleaf Weeds and Wild Oats	2.1 - 3.1 L/ha AATREX Liquid 480 Herbicide				
Yellow Nutsedge, Annual Grasses and	2.1 - 3.1 L/ha	+	1.25 – 1.75 L/ha		
Broadleaf Weeds	AATREX Liquid 480		DUAL Magnum or		
	Herbicide		DUAL II Magnum		
Annual Grasses and Broadleaf Weeds	2.3 - 2.75 L/ha	+	4.25 - 8.5 L/ha		
	AATREX Liquid 480		Eradicane 8E <sup>1</sup>		
	Herbicide				
<sup>1</sup> Do not use AATREX Liquid 4	Do not use AATREX Liquid 480 Herbicide/Fradicane 8E Herbicide tank mix on corn				

Do not use AATREX Liquid 480 Herbicide/Eradicane 8E Herbicide tank mix on corn seed stock.

If tillage is intended after spraying, do not incorporate AATREX Liquid 480 Herbicide deeper than 5.0 cm.

CONSULT TANK MIX PARTNER LABELS FOR COMPLETE INSTRUCTIONS AND RESTRICTIONS.

WEEDS CONTROLLED	PRODUCT RATES	,	
Broadleaf Weeds and Wild Oats	2.1 - 3.1 L/ha AATREX	Liquid	180 Herbicide
Broadleaf Weeds, Wild Oats and	2.1 - 3.1 L/ha	•	1.25 L/ha
Triazine Tolerant Weeds <sup>3</sup>		+	Banvel <sup>®</sup> II <sup>1, 2</sup>
	AATREX Liquid 480		
	Herbicide		
Annual Grasses and Broadleaf Weeds	2.1 - 3.1 L/ha	+	1.25 – 1.75 L/ha
	AATREX Liquid 480		DUAL Magnum or
	Herbicide		DUAL II Magnum
Annual Grasses, Broadleaf Weeds	2.1 - 3.1 L/ha	+	1.25 – 1.75 L/ha
and Triazine Tolerant Weeds	AATREX Liquid 480		DUAL Magnum or
	Herbicide		DUAL II Magnum
		+	1.25 L/ha
			Banvel II <sup>1,2</sup>
	2.3 - 3.1 L/ha	+	1.25 – 1.75 L/ha
	AATREX Liquid 480		DUAL Magnum or
	Herbicide		DUAL II Magnum
		+	0.75 - 1.5 kg/ha
		•	Lorox <sup>®</sup> DF <sup>1</sup>
	2.1 - 3.1 L/ha	+	1.25 – 1.75 L/ha
		Ŧ	
	AATREX Liquid 480		DUAL Magnum or
	Herbicide		DUAL II Magnum
		+	0.3 L/ha
			CALLISTO <sup>®</sup> 480SC <sup>2</sup>
Annual Grasses, Broadleaf Weeds	1.67 L/ha	+	0.165 L/ha
and Triazine and ALS Tolerant Weeds	AATREX Liquid 480		Converge <sup>®</sup> Pro Suspension
	Herbicide		Herbicide <sup>1,2</sup>
	OR		
	2.22 L/ha	+	0.22 L/ha
	AATREX Liquid 480		Converge Pro Suspension
	Herbicide		Herbicide <sup>1,2</sup>
Annual Grasses, Broadleaf Weeds,	1.67 L/ha	+	0.165 L/ha
Triazine and ALS Tolerant Weeds and	AATREX Liquid 480		Converge Pro Suspension
Emerged Annual or Perennial Weeds	Herbicide		Herbicide
		+	2.5 L/ha
			TOUCHDOWN <sup>®</sup> iQ,
			Roundup <sup>®</sup> Original, Roundup
			Transorb or Vantage <sup>TM1,2</sup>
	OR		riansono or variage
	2.22 L/ha		0.22 L/ha
		+	
	AATREX Liquid 480		Converge Pro Suspension
	Herbicide		Herbicide
		+	2.5 L/ha
			TOUCHDOWN iQ, Roundup
			Original, Roundup Transorb
			or Vantage <sup>1,2</sup>
<sup>1</sup> DO NOT APPLY TO SWEET (	CORN		

DO NOT APPLY TO SWEET CORN.

<sup>2</sup> Eastern Canada only.

<sup>3</sup> This tank mix will control triazine tolerant forms of the weeds listed on the Banvel II Herbicide label.

CONSULT TANK-MIX PARTNER LABELS FOR COMPLETE INSTRUCTIONS AND RESTRICTIONS.

A firm, level seedbed free from large clumps and surface trash must be prepared to ensure uniform weed control.

#### Do not use AATREX Liquid 480 Herbicide on loose and rough seedbeds.

WEEDS CONTROLLED	PRODUCT RATES	
Broadleaf Weeds and Wild Oats	2.1 - 3.1 L/ha +	17 L/ha emulsifiable crop
Dibadieal Weeds and Wild Dats	AATREX Liquid 480 Herbicide	oil
	2.1 - 3.1 L/ha +	2.75 - 5.5 L/ha
	AATREX Liquid 480 Herbicide	Kornoil Concentrate <sup>2</sup>
Broadleaf Weeds, Wild Oats and Triazine	2.1 - 3.1 L/ha +	0.6 L/ha
Tolerant Weeds <sup>1</sup>	AATREX Liquid 480 Herbicide	Banvel II <sup>3</sup>
	•	
		0.85 L/ha
	AATREX Liquid 480 Herbicide	
	2.1 - 3.1 L/ha +	1.0 L/ha
	AATREX Liquid 480 Herbicide	
	2.1 - 3.1 L/ha +	1.0 L/ha
	AATREX Liquid 480 Herbicide	
Broadleaf Weeds and Triazine Tolerant	1.0 L/ha +	1.0 - 1.2 L/ha
Weeds <sup>6</sup>	AATREX Liquid 480 Herbicide	
Annual Grasses and Broadleaf Weeds	2.1 - 3.1 L/ha +	1.25 – 1.75 L/ha
	AATREX Liquid 480 Herbicide	DUAL Magnum or
		DUAL II Magnum
Annual Grasses, Broadleaf Weeds and	2.1 - 3.1 L/ha +	1.25 – 1.75 L/ha
Triazine Tolerant Weeds	AATREX Liquid 480 Herbicide	DUAL II Magnum or
		DUAL Magnum
	+	0.3 L/ha
		CALLISTO 480SC7,8,9
Eastern black nightshade, redroot	0.58 L/ha +	0.21 L/ha
pigweed, velvetleaf, common ragweed	AATREX Liquid 480 Herbicide	CALLISTO 480SC <sup>7,9,10,11</sup>
Annual Grasses and Eastern black	0.58 L/ha +	0.21 L/ha
nightshade, redroot pigweed, velvetleaf,	AATREX Liquid 480 Herbicide	
common ragweed	+	33.7 g/ha Ultim <sup>®</sup> 75DF <sup>12</sup>
		or
	+	33.4 g/ha Accent <sup>®</sup> 75DF

# POST-EMERGENT TANK MIXES (Silage, Field, Sweet Corn)

<sup>1</sup> Tank mix with Banvel II or TARGET DS will control triazine tolerant forms of the weeds listed on their labels.

<sup>2</sup> Rate of Kornoil Concentrate depends on water volume used. Use 300 L water/ha at higher rate.

<sup>3</sup> DO NOT APPLY TO SWEET CORN.

<sup>4</sup> WEAR CHEMICAL-RESISTANT NITRILE GLOVES WHEN MIXING/LOADING, SPRAYING AND DURING CLEAN UP AND REPAIR. SEE TANK MIX PARTNER LABEL.

<sup>5</sup> CORN WILL BE DAMAGED IF TREATED WITH THIS TANK MIX AFTER THE 6-LEAF STAGE.

<sup>6</sup> This treatment will provide control of:

- Redroot Pigweed (triazine susceptible) seedlings up to the 6-leaf stage.
- Velvetleaf seedlings up to the 6-leaf stage and less than 10 cm in height.
- Common Ragweed seedlings up to the 8-leaf stage.
- 7 Eastern Canada only.
- <sup>8</sup> Apply on spike to 2 leaf stage of corn.
- <sup>9</sup> Apply to field corn only.
- <sup>10</sup> Apply on 3 to 8 leaf stage of corn.

- <sup>11</sup> This tank-mix with CALLISTO 480SC Herbicide must be applied with the non-ionic surfactant AGRAL<sup>®</sup> 90 at 0.2% v/v (2.0 L for each 1000 L of spray mixture).
- <sup>12</sup> Tankmixes containing Ultim can only be applied up to the 6 leaf stage of corn.

CONSULT TANK MIX PARTNER LABELS FOR COMPLETE INSTRUCTIONS AND RESTRICTIONS.

- ALWAYS APPLY AATREX LIQUID 480 HERBICIDE BEFORE THE CORN REACHES 30 CM IN HEIGHT.
- SOME INJURY TO CORN CAN OCCUR WITH AATREX LIQUID 480 HERBICIDE APPLIED IN OIL-WATER EMULSIONS UNDER CROP STRESS CONDITIONS.
- USE ONLY CROP OILS OR OIL CONCENTRATES LABELLED FOR USE WITH AATREX LIQUID 480 HERBICIDE.
- OILS CONTAMINATED WITH WATER OR OTHER MATERIALS CAN CAUSE COMPATIBILITY PROBLEMS, CROP INJURY, OR BOTH.

**DO NOT** apply by air.

**DO NOT** apply during periods of dead calm or when winds are gusty.

**DO NOT** overspray non-target terrestrial or aquatic habitats.

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

#### **BUFFER ZONES:**

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

Method of application	Buffer zone required for the protection of:			
	Terrestrial habitat (m) Aquatic habitat (m)			
Field sprayer*	10	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 canopy, the labeled 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 canopy, the labeled buffer zones can be reduced by 30%.

#### WARNING:

Injury may occur if land treated with AATREX Liquid 480 Herbicide is planted to any crop other than field corn or sorghum in the same season. One year after application there is virtually no hazard to most rotational crops when annual weed label rates are applied. Sugar beets and tobacco are sensitive to AATREX Liquid 480 Herbicide and should not be planted on land treated with AATREX Liquid 480 Herbicide the previous year. When extended periods of dry weather occur during the year of treatment, there can be some injury to succeeding crops such

as white beans, onions, peas, tomatoes and turnips. Injury is most likely to occur when the seedling crop is subjected to periods of stress e.g., during periods of abnormally hot, dry weather.

Under conditions of heavy rainfall sufficient to cause erosion, soil containing AATREX Liquid 480 Herbicide may wash to lower areas of land and injury to existing or subsequent crops other than corn may result.

THOROUGH TILLAGE INCLUDING PLOUGHING SHOULD PRECEDE THE PLANTING OF CROPS OTHER THAN CORN. PLOUGH THE LAND FLAT AS OPPOSED TO SETTING THE FURROW ON EDGE. UNEVEN APPLICATION OF AATREX LIQUID 480 HERBICIDE OR APPLICATION IN EXCESS OF RECOMMENDED RATES WILL NOT INJURE CORN BUT MAY RESULT IN THE INJURY OF SUCCEEDING CROPS OTHER THAN CORN.

# 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 Syngenta Canada Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Syngenta Canada 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 Syngenta Canada Inc. harmless from any claims based on efficacy or phytotoxicity in connection with the uses described below.

TIMING	WEEDS CONTROLLED	RATE/HA AATREX LIQUID 480 HERBICIDE	RATE PER HECTARE/TANK MIX PARTNER	REMARKS
Pre- emergent	Annual grasses and broadleaf weeds including triazine tolerant weeds	2.1 - 3.1 L	+ 1.25 L DUAL II Magnum + 0.79 – 1.56 L Afolan <sup>™</sup> F or 0.79 – 1.56 L Lorox L or 0.75 – 1.5 kg Lorox DF or 0.79 – 1.56 L Linuron 480 L	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.

#### SWEET CORN TANK MIXTURE

#### CONTROL OF BUR CUCUMBER (Sicyos angulatus)

TIMING	RATE/HA AATREX LIQUID 480 HERBICIDE	RATE/HA PARDNER <sup>1</sup> HERBICIDE	REMARKS
Post-emergent	3.1 L	1.0 L	Make only one application per year. Apply in 150-300 L water/ha. Corn should be treated at the 4 to 8-leaf stage. Bur cucumber seedlings in the 1 to 4-leaf stage. Apply by ground equipment only.
		or specific instructions	s regarding soil-type variations, and rotational
crop, grazing or	other restrictions.		

TIMING	WEEDS CONTROLLED	RATE/HA AATREX LIQUID 480 HERBICIDE	RATE/HA PARDNER <sup>1</sup> HERBICIDE	REMARKS
Post- emergent <sup>2</sup>	Volunteer adzuki bean ( <i>Vigna</i> <i>angularis),</i> giant ragweed <sup>3</sup>	3.1 L	1.0 L	Make only one application per year. Apply in 200 L water/ha. Apply by ground equipment only

<sup>1</sup> Consult the Pardner Herbicide label for precautions.

<sup>2</sup> Apply at 4 to 8 leaf stage (corn), unifoliate to fourth trifoliate leaf stage (adzuki bean), between cotyledon and 10 leaf growth stage of giant ragweed.

<sup>3</sup> Suppression only.

# FIELD CORN (EASTERN CANADA ONLY)

TIMING <sup>1</sup>	WEEDS CONTROLLED	RATE/HA AATREX LIQUID 480 HERBICIDE	RATE PER HECTARE/TANK MIX PARTNER <sup>2</sup>	REMARKS
Post- emergent <sup>3</sup>	Volunteer Adzuki Bean ( <i>Vigna</i> <i>angularis)</i> , large crabgrass <i>(Digitaria</i> <i>sanguinalis)</i> <sup>5</sup> , Giant Ragweed <sup>4</sup> , Common Cocklebur <sup>4</sup>	0.58 L	0.21 L CALLISTO 480SC + 0.2% v/v AGRAL 90 in 100-200 L water/ha	Make only one application per year. Apply by ground equipment only. Pre-Harvest Interval is 100 days (grain/stover) and 90 days (forage).

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

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

<sup>3</sup> Apply at the unifoliate to fourth trifoliate leaf stage of adzuki bean and when giant ragweed is at the cotyledon-10 leaf stage and when common cocklebur is up to the cotyledon – 6 leaf stage.

<sup>4</sup> Suppression only.

<sup>5</sup> Apply when large crabgrass is at the 1 - 6 leaf stage.

SORGHUM (EASTERN CANADA ONLY)				
TIMING <sup>1</sup>	WEEDS CONTROLLED	RATE/HA AATREX LIQUID 480 HERBICIDE	REMARKS	
Pre-emergent or Post-emergent	Broadleaf weeds and wild oats	2.1 L	<ul> <li>Make only one application per year. Apply by ground equipment only. Apply in a minimum of 150 L of water/ha.</li> <li>Pre-Harvest Interval is 90 days for grain.</li> <li>Grazing Restrictions: Do not graze or feed forage from treated areas for 60 days following a preemergent or 45 days following a post-emergent application.</li> <li>Heavy rain immediately following application tends to cause excessive concentrations of herbicide in seed furrow, resulting in possible crop injury.</li> <li>Application to sorghum growing under stress caused by minor element deficiency or to sorghum growing on highly calcareous soil may result in crop injury.</li> <li>Injury may occur if both this herbicide and an atplanting systemic insecticide applied in-furrow are used.</li> <li>For all soil applied applications prior to crop emergence, do not apply to coarse textured soils, i.e., sand, loamy sand, sandy, or to medium – and fine-textured soils having less than 1% organic matter, or injury may occur.</li> </ul>	

#### SWITCHGRASS

TIMING	WEEDS CONTROLLED	RATE/HA AATREX LIQUID 480 HERBICIDE	REMARKS
Pre-plant incorporated or pre-emergent to crop	Wormseed mustard, wild buckwheat, wild mustard, lamb's- quarters, common purslane, redroot pigweed, ragweed, volunteer clover, smartweed, wild oats, lady's-thumb	2.1 – 3.1 L	Make only one application per year. Apply in year of establishment only. Apply by ground equipment only. Apply in a minimum of 150 L of water/ha. Pre-harvest interval is 485 days. Do not graze treated areas. Do not use seeds for bird food.

#### **RESISTANCE-MANAGEMENT RECOMMENDATIONS**

For resistance management, AATREX Liquid 480 Herbicide is a Group 5 herbicide. Any weed population may contain or develop plants naturally resistant to AATREX Liquid 480 Herbicide and other Group 5 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 AATREX Liquid 480 Herbicide or other Group 5 herbicides with different herbicide groups that control the same weeds in a field.

Use tank mixtures with herbicides from a different group when such use is permitted.

Herbicide use should be based on an IPM program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical), cultural, biological and other chemical control practices.

Monitor treated weed populations for resistance development.

Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.

Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.

For further information and to report suspected resistance, contact Syngenta Canada Inc. company representatives at 1-87-SYNGENTA (1-877-964-3682) or at <u>www.syngenta.ca</u>.

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