**GROUP** 6 HERBICIDE

# IPCO<sup>®</sup> BROTEX<sup>®</sup>480

## LIQUID HERBICIDE

CONTAINS BROMOXYNIL

For use in WHEAT (Spring and Winter), BARLEY, OATS, FLAX (including low linolenic acid varieties), CORN, FALL RYE, CANARY SEED (for seed production), TRITICALE, GARLIC, ONION (dry bulb only), SEEDLING ALFALFA, ESTABLISHED ALFALFA (for seed production only), and SEEDLING GRASSES, FORAGE SORGHUM, FORAGE MILLET, as a pre-seed/pre-plant application prior to planting CANOLA, ZERO TILL and SUMMER FALLOW

AGRICULTURAL READ THE LABEL AND BOOKLET BEFORE USING

ACTIVE INGREDIENT: BROMOXYNIL (present as the octanoate ester):

480g/L REGISTRATION NO: 31348 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 9.7 litres



#### WARNING EYE IRRITANT

INTERPROVINCIAL COOPERATIVE LIMITED P.O. BOX 1050, SASKATOON, SASKATCHEWAN S7K 3M9 1-204-233-3461

<sup>®</sup>T.M. Reg'd.

RC 538-0814

#### **PRECAUTIONS:**

**KEEP OUT OF REACH OF CHILDREN.** Causes eye irritation, **DO NOT** get in eyes. Avoid contact with skin and clothing. Harmful or fatal if swallowed. Store the container tightly closed away from seeds, fertilizer, plants and foodstuffs. Wash concentrate from skin or eyes immediately. Wear goggles or face shield during mixing/loading.

**Ground applications**: Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, clean-up and repair. Wear a long-sleeved shirt and long pants, chemical resistant gloves, and socks plus shoes during applications. Gloves are not required during application within a closed cab.

Aerial applications: the field crew and the mixer/loaders: Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, clean-up and repair.

**Aerial applicators**: Wear a long-sleeved shirt, long pants, socks and shoes during application. Gloves are not required during application within a closed cockpit. Do not allow the pilot to mix chemicals to be loaded onto the aircraft.

CROP	POST- APPLICATION ACTIVITY	REI
Garlic	Irrigation, handset	2 days
Game	All other activities	24 hours
	Irrigation, handset	5 days
Sweet Corn	Harvest, hand	20 days
	All other activities	24 hours

DO NOT enter or allow worker entry into treated areas during the restrictedentry intervals (REIs) specified in the following table:

DO NOT enter or allow worker entry into treated areas of other crops during the restricted-entry interval (REI) of 24 hours.

DO NOT apply this product in a way that this product will contact workers or other persons, either directly or through drift. Only handlers wearing personal protective equipment may be in the area being treated during application.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. DO NOT reuse them.

Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Avoid breathing spray mist. After use wash hands and other exposed skin. Avoid spray drift onto crops other than those recommended.

This product contains a petroleum distillate which is moderately to highly toxic to aquatic organisms.

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.

Do not use in residential areas, which are defined as sites where bystanders may be present during or after spraying, including homes, schools, parks, playgrounds, playing fields, and public buildings.

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.

**Pre-harvest grazing intervals** (wheat, barley, oats, forage sorghum, forage millet and seedling alfalfa): Do not use treated crops for grazing of livestock or green feed until 30 days after application of IPCO BROTEX 480 Liquid Herbicide unless otherwise stated on the label. Do not cut treated crops for forage until 30 days after application of IPCO BROTEX 480 Liquid Herbicide.

**CAUTION:** Do not graze other treated crops or cut for feed unless specified above; sufficient data are not available to support such use.

#### **ENVIRONMENTAL PRECAUTIONS:**

Toxic to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under **DIRECTIONS FOR USE**. Do not apply to any body of water. 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.

Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist). Do not apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift. Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

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.

#### FIRST AID:

**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 on skin or clothing, take off contaminated clothing. Rinse skin IMMEDIATELY with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice. If inhaled, move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

**If in eyes**, hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

## Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

#### **TOXICOLOGICAL INFORMATION:**

This product contains petroleum distillates. Vomiting may cause aspiration pneumonia. Treat symptomatically.

#### **STORAGE CONDITIONS:**

Store the container tightly closed away from seeds, fertilizer, plants and foodstuffs. This IPCO BROTEX 480 Liquid Herbicide formulation will solidify at temperatures below -20°C but will become useable again at temperatures above 0°C. Insecticides and fungicides should be segregated from herbicides so as to prevent the possibility of cross-contamination.

#### SHAKE WELL BEFORE USING.

#### **RECYCLABLE CONTAINER DISPOSAL:**

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

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

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

#### **REFILLABLE CONTAINERS DISPOSAL:**

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.

#### DISPOSAL OF UNUSED, UNWANTED PRODUCT:

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

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

# IPCO® BROTEX®480

## LIQUID HERBICIDE

CONTAINS BROMOXYNIL

For use in WHEAT (Spring and Winter), BARLEY, OATS, FLAX (including low linolenic acid varieties), CORN, FALL RYE, CANARY SEED (for seed production), TRITICALE, GARLIC, ONION (dry bulb only), SEEDLING ALFALFA, ESTABLISHED ALFALFA (for seed production only), and SEEDLING GRASSES, FORAGE SORGHUM, FORAGE MILLET, as a pre-seed/pre-plant application prior to planting CANOLA, ZERO TILL and SUMMER FALLOW

AGRICULTURAL READ THE LABEL AND BOOKLET BEFORE USING

ACTIVE INGREDIENT: BROMOXYNIL (present as the octanoate

ester): 480 g/L REGISTRATION NO: 31348 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 9.7 litres



#### WARNING EYE IRRITANT

INTERPROVINCIAL COOPERATIVE LIMITED P.O. BOX 1050, SASKATOON, SASKATCHEWAN S7K 3M9 1-204-233-3461

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RC 538-0814

LADEL INDEA	$-\Pi CO BRO$	LEA 400 LIQUID HERDICIDE	
General Information and Directions for Use	Go to Section 1	Garlic	Go to Section 12
Weeds Controlled	Go to Section 2	Onions	Go to Section 13
Wheat (spring & winter) – not under- seeded to legumes	Go to Section 3	Seed and Established Alfalfa	Go to Section 14
Barley – not under-seeded to legumes	Go to Section 4	Pre-Seed/Pre-Plant Application Prior to Seeding Canola	Go to Section 15
Oats - not under-seeded to legumes	Go to Section 5	Minimum or Zero Tillage	Go to Section 16
Corn – field and sweet	Go to Section 6	Summer Fallow	Go to Section 17
Field corn (do not use on sweet corn)	Go to Section 7	Seedling Grasses (not under-seeded to legumes)	Go to Section 18
Fall Rye – not under-seeded to legumes	Go to Section 8	Forage & Sorghum Millet	Go to Section 19
Flax (including low linolenic acid varieties)	Go to Section 9	Notice	Go to Section 20
Canary Seed (for seed production)	Go to Section 10	Mixing Table	Go to Section 21
Triticale	Go to Section 11		

LABEL INDEX – IPCO BROTEX 480 LIQUID HERBICIDE

### SECTION 1: GENERAL INFORMATION AND DIRECTIONS FOR USE

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:** For best results spray when weeds are in the seedling stage. Apply in good growing conditions. Application **must** be made before the crop shields the weeds.

**Sprayer:** Wash the tank and clean all filters, screens and tips. Select nozzle tips to apply the recommended volume of water per hectare. Flood jet type tips are not recommended. Adjust boom height to ensure uniform coverage of weeds. For ground application, spray at 5–10 km/h. Ensure that all tips are in good condition and spraying the same volume.

**Mixing:** Half fill the tank with clean water. Add the required amount of IPCO BROTEX 480 Liquid Herbicide and agitate thoroughly. Fill the tank and agitate again before use.

**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.

#### AERIAL APPLICATION (wheat and barley only):

**Aerial Application:** DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply when wind speed is greater than 16 km/h at flying height at the site of application. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) medium classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length MUST NOT exceed 65% of the wing or rotorspan.

Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rate and conditions of this label.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

**Use Precautions:** Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the *National Aerial Pesticide Application Manual*, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides.

Do not apply to any body of water. Avoid drifting of spray onto any body of water or other nontarget areas. Specified buffer zones should be observed.

Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist). Do not apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift. Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

**Operator Precautions:** Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.

It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

The field crew and the mixer/loaders: Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, goggles or face shield, socks and shoes during mixing, loading, cleanup and repair. Aerial applicators: Wear a long-sleeved shirt, long pants, socks and shoes during application. Gloves are not required during application within a closed cockpit. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

**Product Specific Precautions:** Read and understand the entire label before opening this product. If you have questions, call Interprovincial Cooperative Limited at 1-204-233-3461 or obtain technical advice from the distributor or your provincial agricultural representative.

Application of this specific product must meet and/or conform to the following:

**Volume:** IPCO BROTEX 480 Liquid Herbicide plus either MCPA or 2,4-D must be applied in volume rates of not *less than* 20 L/ha. For best results when there is a heavy crop canopy, or when the majority of the weeds are cow cockle, green or pale smartweed, hemp-nettle, redroot pigweed or Canada thistle, a volume rate of 40 L/ha is recommended.

#### **Buffer Zones to Protect Sensitive Habitat**

Use of the following spray methods or equipment DO NOT require a buffer zone: hand-held or backpack sprayer, inter-row hooded sprayer, spot treatment, soil drench and soil incorporation.

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.

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

Method of	Сгор		Buffer Zor	nes (metres)	<b>Required</b> f	or the Prote	ction of:
Application	n		Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:		Terrestrial Habitat
			Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field Sprayer*	All crops		1	1	1	1	1
Aprial	Barley and	Fixed wing	20	5	1	1	55
Aerial	wheat	Rotary wing	20	3	1	1	45

\*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%.

#### HERBICIDE RESISTANCE MANAGEMENT RECOMMENDATIONS:

For resistance management, IPCO BROTEX 480 Liquid Herbicide is a Group 6 herbicide. Any weed population may contain or develop plants naturally resistant to IPCO BROTEX 480 Liquid Herbicide and other Group 6 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 IPCO BROTEX 480 Liquid Herbicide or other Group 6 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 or to report suspected resistance, contact your local Interprovincial Cooperative Limited representative, or call Interprovincial Cooperative Limited at 1-204-233-3461.

#### **PRECAUTIONS:**

**KEEP OUT OF REACH OF CHILDREN.** Causes eye irritation, **DO NOT** get in eyes. Avoid contact with skin and clothing. Harmful or fatal if swallowed. Store the container tightly closed away from seeds, fertilizer, plants and foodstuffs. Wash concentrate from skin or eyes immediately. Wear goggles or face shield during mixing/loading.

**Ground applications**: Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, clean-up and repair. Wear a long-sleeved shirt and long pants, chemical resistant gloves, and socks plus shoes during applications. Gloves are not required during application within a closed cab.

Aerial applications: the field crew and the mixer/loaders: Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, clean-up and repair.

**Aerial applicators**: Wear a long-sleeved shirt, long pants, socks and shoes during application. Gloves are not required during application within a closed cockpit. Do not allow the pilot to mix chemicals to be loaded onto the aircraft.

DO NOT enter or allow worker entry into treated areas during the restrictedentry intervals (REIs) specified in the following table:

CROP	POST- APPLICATION ACTIVITY	REI
Garlic	Irrigation, handset	2 days
Game	All other activities	24 hours
	Irrigation, handset	5 days
Sweet Corn	Harvest, hand	20 days
	All other activities	24 hours

DO NOT enter or allow worker entry into treated areas of other crops during the restricted-entry interval (REI) of 24 hours.

DO NOT apply this product in a way that this product will contact workers or other persons, either directly or through drift. Only handlers wearing personal protective equipment may be in the area being treated during application.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. DO NOT reuse them.

Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Avoid breathing spray mist. After use wash hands and other exposed skin. Avoid spray drift onto crops other than those recommended.

This product contains a petroleum distillate which is moderately to highly toxic to aquatic organisms.

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.

Do not use in residential areas, which are defined as sites where bystanders may be present during or after spraying, including homes, schools, parks, playgrounds, playing fields, and public buildings.

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.

**Pre-harvest grazing intervals** (wheat, barley, oats, forage sorghum, forage millet and seedling alfalfa): Do not use treated crops for grazing of livestock or green feed until 30 days after application of IPCO BROTEX 480 Liquid Herbicide unless otherwise stated on the label. Do not cut treated crops for forage until 30 days after application of IPCO BROTEX 480 Liquid Herbicide.

**CAUTION:** Do not graze other treated crops or cut for feed unless specified above; sufficient data are not available to support such use.

#### **ENVIRONMENTAL PRECAUTIONS:**

Toxic to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under **DIRECTIONS FOR USE**. Do not apply to any body of water. 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.

Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist). Do not apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift. Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

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.

#### FIRST AID:

**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 on skin or clothing**, take off contaminated clothing. Rinse skin IMMEDIATELY with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice. **If inhaled**, move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

**If in eyes**, hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

# Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

#### TOXICOLOGICAL INFORMATION:

This product contains petroleum distillates. Vomiting may cause aspiration pneumonia. Treat symptomatically.

#### **STORAGE CONDITIONS:**

Store the container tightly closed away from seeds, fertilizer, plants and foodstuffs. This IPCO BROTEX 480 Liquid Herbicide formulation will solidify at temperatures below -20°C but will become useable again at temperatures above 0°C. Insecticides and fungicides should be segregated from herbicides so as to prevent the possibility of cross-contamination.

#### SHAKE WELL BEFORE USING.

#### **RECYCLABLE CONTAINER DISPOSAL:**

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

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

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

#### **REFILLABLE CONTAINERS DISPOSAL:**

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.

#### DISPOSAL OF UNUSED, UNWANTED PRODUCT:

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

#### **SECTION 2: Weeds Controlled and Application Timing**

#### **APPLICATION TIMING:**

For best results, spray up to 4-leaf stage of weeds. Apply in good growing conditions. Application must be made before the crop shields the weeds.

#### WEEDS CONTROL BY IPCO Brotex 480 Liquid Herbicide ALONE

	1
Seedlings up to 4-leaf stage:	
Green Smartweed	Common Ragweed
Pale Smartweed	Pigweed****
Lady's-thumb	Cocklebur
Bluebur	Russian thistle**
Kochia**	Wild mustard*
Cow Cockle*	Stinkweed*
Velvet leaf***	American nightshade

#### Seedlings up to 8-leaf stage:

Wild buckwheat		Lamb's-quarters
Common buckwheat		Common groundsel
Tartary buckwheat		

- \* Under normal conditions will be controlled up to the 4-leaf stage.
  Plants beyond this stage are unlikely to be controlled. The higher rate generally gives better control.
- \*\* Spray before plants are 5 cm high.
- \*\*\* Spray before plants are 8 cm high.
- \*\*\*\* Including triazine resistant pigweed

#### WEEDS CONTROL BY IPCO Brotex 480 Liquid Herbicide + MCPA

Weeds listed for IPCO Brotex 480 Liquid Herbicide alone **plus** these additional weeds: **Seedlings up to 4-leaf stage:** 

Seedings up to 4-leaf stage:	
Ball mustard	Canada thistle****
Flixweed	Hemp nettle***
Night flowering catchfly	Perennial sowthistle****
Redroot pigweed	Scentless chamomile*
Shepherd's purse	Volunteer rapeseed/canola**
Volunteer sunflower	_

#### Seedlings up to 8 leaf stage:

Comm	non ragweed	Stinkweed
Wild 1	nustard	Wormseed mustard
*	Spring annuals only. Will not con-	trol overwintered weeds.
**	For high infestations tank-mix 550	) g active ingredient MCPA per ha.

\*\*\* Tank-mix 550 g active ingredient MCPA per ha. Plants beyond the 4-leaf stage are not likely to be controlled.
 Plants emerging after application, which is often the case on peat-type soils, will not be controlled

\*\*\*\* Top growth control.

#### WEEDS CONTROL BY IPCO Brotex 480 Liquid Herbicide + 2,4-D

Weeds listed for IPCO Brotex 480 Liquid Herbicide alone plus these additional weeds:

#### Seedlings up to 4-leaf stage:

Redroot pigweed	Shepherd's purse
Night flowering catchfly	Volunteer sunflower
Flixweed*	Ball mustard

#### Seedlings up to 8 leaf stage:

Stinkweed\* Wild mustard \*The higher rate of 2,4-D is recommended for larger over winter weeds (fall rosettes).

#### SECTION 3 - WHEAT (Spring and Winter — not underseeded to legumes)

<b>IPCO BROTEX 480</b>	) Liquid Herbicide used ALONE
Weeds Controlled	See Section 2
Spray volume and	Apply in 100 L water per hectare at a pressure of 275 kPa.
pressure	
Timing	Spring wheat may be treated from the 2-leaf until the early flag leaf stage.
	Winter wheat may be treated from the 2- to 4-leaf stage in the fall or from
	the time growth begins to the early flag leaf stage in the spring.
Application rate	0.6–0.7 L/ha. (9.7 L treats 13.8–16.2 ha.) If weeds are beyond the leaf
	stages indicated on under adverse growing conditions, use of the higher
	recommended rate will improve control.

IPCO BROTEX 480	) Liquid Herbicide + MCPA
Weeds Controlled	See Section 2 under IPCO Brotex 480 Liquid Herbicide + MCPA
Spray volume and	Apply in 50–100 L water per hectare at a pressure of 275 kPa.
pressure	
Timing	Spring wheat may be treated from the 2-leaf until the early flag leaf stage.
	Winter wheat may be treated from the 2- to 4-leaf stage in the fall or from
	the time growth begins to the early flag leaf stage in the spring.
Application rate	Spring wheat: IPCO BROTEX 480 Liquid Herbicide at 0.6 L/ha (9.7 L
	treats 16.2 ha) tank-mixed with 275–550 g active ingredient MCPA per
	hectare where indicated.
	Winter wheat: IPCO BROTEX 480 Liquid Herbicide at 0.6 L/ha (9.7 L
	treats 16.2 ha) can be tank-mixed with 275 g active ingredient MCPA per
	hectare. Refer to table at end of booklet for correct volume of MCPA.
	<b>Note:</b> MCPA-K is preferred for hemp-nettle although other formulations
	may be used. Refer to the MCPA label for precautions and limitations.
	Add MCPA to the spray tank first, agitate, then add IPCO BROTEX 480

Liquid Herbicide.
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IPCO BROTEX 48	IPCO BROTEX 480 Liquid Herbicide + 2,4-D	
Weeds Controlled	See Section 2	
Spray volume and	Apply in 100 L water per hectare at a pressure of 275 kPa.	
pressure		
Timing	Spring and winter wheat may be treated from the 4-leaf until the early flag	
	leaf stage. Application before the 4-leaf stage may injure the crop.	
Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.6 L/ha (9.7 L treats 16.2 ha)	
	tank-mixed with 275 - 420 g active ingredient 2,4-D per hectare. Refer to	
	the table at end of booklet for correct volume of 2,4-D.	

**Note:** 2,4-D ester is preferred although other formulations may be used. Add 2,4-D to the spray tank first, agitate and then add IPCO BROTEX 480 Liquid Herbicide. Refer to the 2,4-D label for precautions and limitations.

IPCO BROTEX 480 Liquid Herbicide + AVENGE® 200-C (spring wheat only)	
Weeds Controlled	See Section 2, plus wild oats in the 3-5 leaf stage.
Spray volume and	Apply in 100 L water per hectare at a pressure of 275 kPa.
pressure	
Timing	Spring wheat may be treated from the 2-leaf until the 6-leaf stage.
Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.6–0.7 L/ha (9.7 L treats 13.8-
	16.2 ha) tank-mixed with AVENGE 200-C at 3.5–4.25 L/ha.

**Note:** Add IPCO BROTEX 480 Liquid Herbicide to the spray tank first, agitate and then add AVENGE 200-C. AVENGE 200-C can only be applied to certain varieties of wheat. Refer to the AVENGE 200-C label.

For best control of all broadleaved weeds, a three-way tank-mix with MCPA ester is preferred, particularly where mustards occur.

IPCO BROTEX 480 Liquid Herbicide + MCPA + AVENGE 200-C (spring wheat only)	
Weeds Controlled	See Section 2 under IPCO Brotex 480 Liquid Herbicide + MCPA plus wild
	oats in the 3-5 leaf stage.
Spray volume and	Apply in 100 L water per hectare at a pressure of 275 kPa.
pressure	
Timing	Spring wheat may be treated from the 2-leaf until the 6-leaf stage.
Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.6 L/ha (9.7 L treats 16.2 ha)
	plus 275–550 g active ingredient MCPA ester per hectare tank-mixed with
	AVENGE 200-C at 3.5–4.25 L/ha.

**Note:** Add MCPA to the spray tank first, agitate then add IPCO BROTEX 480 Liquid Herbicide, agitate and finally add AVENGE 200-C.

For best control of all broadleaved weeds, a three-way tank-mix with MCPA ester is preferred, particularly where mustards occur.

<b>IPCO BROTEX 48</b>	IPCO BROTEX 480 Liquid Herbicide + Liquid ACHIEVE® SC Herbicide	
Weeds	See Section 2, plus weeds indicated on the Liquid ACHIEVE SC	
Controlled:	Herbicide Label	
Spray volume and	Apply in 100 L water per hectare at a pressure of 275 kPa.	
pressure		
Timing	Durum wheat, spring wheat and winter wheat may be treated from the 2-	
	leaf until the early flag leaf stage of growth.	
Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.6 L/ha (9.7 L treats 16.2 ha)	
	tank mixed with Liquid ACHIEVE SC Herbicide at 0.5 L/ha. When using	
	this tank-mixture, add Turbocharge <sup>®</sup> to the spray tank at a concentration of	
	0.5% v/v (i.e. 0.5 L of Turbocharge per 100 L of spray solution).	

**Note:** Follow all mixing and spraying precautions, limitations and timing recommendations on the Liquid ACHIEVE SC Herbicide label. IPCO BROTEX 480 Liquid Herbicide and Liquid ACHIEVE SC Herbicide tank-mixtures can be used in all varieties of spring wheat (including Canada Western red spring, amber durum, soft white spring, extra strong and Canada prairie spring) and red winter wheat.

IPCO BROTEX 480 Liquid Herbicide + HORIZON® 240 EC Tank-Mix (durum and spring		
wheat only) For use i	wheat only) For use in Manitoba, Saskatchewan, Alberta plus the Peace River Region of British	
Columbia		
Weeds Controlled	See Section 2, plus weeds indicated on the HORIZON 240 EC Tank-mix	
	Label	
Spray volume and	Apply in 100 L water per hectare at a pressure of 275 kPa.	
pressure		
Timing	Spring wheat and durum wheat may be treated from the 2-leaf to flag leaf.	
Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.6 L/ha (9.7 L treats 16.2 ha)	
	tank-mixed with HORIZON 240 EC at 230 mL/ha or 290 mL/ha plus	
	SCORE <sup>®</sup> adjuvant at a concentration of 0.8% v/v or 1.0% v/v.	

**Note:** Follow all mixing and spraying precautions, environmental precautions, limitations and timing recommendations on the HORIZON 240 EC Tank-Mix label. IPCO BROTEX 480 Liquid Herbicide and HORIZON 240 EC Tank-Mix can be used in all varieties of spring wheat and durum wheat.

<b>IPCO BROTEX 48</b>	PCO BROTEX 480 Liquid Herbicide used ALONE	
Weeds Controlled	See Section 2.	
Spray volume and	Apply in 100 L water per hectare at a pressure of 275 kPa.	
pressure		
Timing	The crop may be treated from the 2-leaf until the early flag leaf stage.	
Application rate	0.6–0.7 L/ha. (9.7 L treats 13.8–16.2 ha.) If weeds are beyond the leaf	
	stages indicated or under adverse growing conditions, use of the higher	

#### **SECTION 4 - BARLEY (not under-seeded to legumes)**

recommended rate will improve control.
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<b>IPCO BROTEX 480</b>	IPCO BROTEX 480 Liquid Herbicide + MCPA	
Weeds Controlled	See Section 2 under IPCO Brotex 480 Liquid Herbicide + MCPA	
Spray volume and	Apply in 50–100 L water per hectare at a pressure of 275 kPa.	
pressure		
Timing	The crop may be treated from the 2-leaf until the early flag leaf stage.	
Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.6 L/ha (9.7 L treats 16.2 ha)	
	tank-mixed with 275–550 g active ingredient MCPA per hectare where	
	indicated. Refer to the table at end of booklet for correct volume of	
	MCPA.	

**Note:** MCPA-K is preferred for hemp-nettle although other formulations may be used. Refer to the MCPA label for precautions and limitations. Add MCPA to the spray tank first, agitate, then add IPCO BROTEX 480 Liquid Herbicide.

IPCO BROTEX 480 Liquid Herbicide + 2,4-D	
Weeds Controlled	See Section 2 under IPCO Brotex 480 Liquid Herbicide + 2,4-D
Spray volume and	Apply in 100 L water per hectare at a pressure of 275 kPa.
pressure	
Timing	The crop may be treated from the 4-leaf until the early flag leaf stage. Application before the 4-leaf stage may result in injury to the crop.
Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.6 L/ha (9.7 L treats 16.2 ha) tank-mixed with 275–420 g active ingredient 2,4-D per hectare. Refer to table at end of booklet for correct volume of 2,4-D.

**Note:** 2,4-D ester is preferred although other formulations may be used. Add 2,4-D to the spray tank first, agitate and then add IPCO BROTEX 480 Liquid Herbicide. Refer to the 2,4-D label for precautions and limitations.

<b>IPCO BROTEX 48</b>	DTEX 480 Liquid Herbicide + AVENGE 200-C	
Weeds Controlled	See Section 2, plus wild oats in the 3-5 leaf stage.	
Spray volume and	Apply in 100 L water per hectare at a pressure of 275 kPa.	
pressure		
Timing	Barley may be treated from the 2- to 6-leaf stage.	
Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.6–0.7 L/ha (9.7 L treats 13.8–	
	16.2 ha) tank-mixed with AVENGE 200-C at 3.5–4.25 L/ha.	

**Note:** Add IPCO BROTEX 480 Liquid Herbicide to the spray tank first, agitate and then add AVENGE 200-C. Refer to the AVENGE 200-C label.

IPCO BROTEX 480 Liquid Herbicide + MCPA + AVENGE 200-C	
Weeds Controlled	See Section 2 under IPCO Brotex 480 Liquid Herbicide + MCPA
	mixture plus wild oats in the 3-5 leaf stage
Spray volume and	Apply in 100 L water per hectare at a pressure of 275 kPa.
pressure	
Timing	Barley may be treated from the 2- to 6-leaf stage.

	Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.6 L/ha (9.7 L treats 16.2
Application rate ha	ha) plus 275–550 g active ingredient MCPA ester per hectare tank-	
		mixed with AVENGE 200-C at 3.5–4.25 L/ha.

**Note:** MCPA should be added to the spray tank first, agitate then add IPCO BROTEX 480 Liquid Herbicide, agitate, then add AVENGE 200-C. Refer to the AVENGE 200-C label. For best control of all broadleaved weeds, a three-way tank-mix with MCPA ester is preferred, particularly where mustards occur.

IPCO BROTEX 480	IPCO BROTEX 480 Liquid Herbicide + Liquid ACHIEVE SC Herbicide	
Weeds Controlled	See Section 2, plus weeds indicated on the Liquid ACHIEVE SC	
	Herbicide Label.	
Spray volume and	Apply in 100 L water per hectare at a pressure of 275 kPa.	
pressure		
Timing	Barley may be treated from the 2-leaf until the early flag leaf stage of	
	growth.	
	Note: IPCO BROTEX 480 Liquid Herbicide and Liquid ACHIEVE SC	
	Herbicide tank-mixtures can be used in all 2 or 6 row varieties of barley	
	(malting and feed varieties).	
Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.6 L/ha (9.7 L treats 16.2 ha)	
	tank-mixed with Liquid ACHIEVE SC Herbicide at 0.5 L/ha. When using	
	this tank-mixture, add Turbocharge to the spray tank at a concentration of	
	0.5% v/v (i.e. 0.5 L of Turbocharge per 100 L of spray solution).	

**Note:** Follow all mixing and spraying precautions, environmental precautions, limitations and timing recommendations on the Liquid ACHIEVE SC Herbicide label.

#### **SECTION 5 - OATS (not under-seeded to legumes)**

IPCO BROTEX 480 Liquid Herbicide used ALONE	
Weeds Controlled	See Section 2.
Spray volume and	Apply in 100 L water per hectare at a pressure of 275 kPa.
pressure	DO NOT apply using aerial application equipment.
Timing	The crop may be treated from the 2-leaf until the early flag leaf stage.
Application rate	0.6–0.7 L/ha. (9.7 L treats 13.8–16.2 ha.) If weeds are beyond the leaf
	stages indicated or under adverse growing conditions, use of the higher
	recommended rate will improve control.

IPCO BROTEX 480 Liquid Herbicide + MCPA	
Weeds Controlled	See Section 2 under IPCO Brotex 480 Liquid Herbicide + MCPA
Spray volume and	Apply in 50–100 L water per hectare at a pressure of 275 kPa.
pressure	DO NOT apply using aerial application equipment.
Timing	The crop may be treated from the 2-leaf until the early flag leaf stage.
Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.6 L/ha (9.7 L treats 16.2 ha)
	tank-mixed with 275–550 g active ingredient MCPA per hectare where
	indicated. Refer to the table at end of booklet for correct volume of
	MCPA.

**Note:** MCPA-K is preferred for hemp-nettle although other formulations may be used. Refer to the MCPA label for precautions and limitations. Add MCPA to the spray tank first, agitate, then add IPCO BROTEX 480 Liquid Herbicide.

#### **SECTION 6 - CORN (field and sweet)**

IPCO BROTEX 480 Liquid Herbicide used ALONE	
Weeds Controlled	See Section 2
Spray volume and	Apply in 200–300 L water per hectare at a pressure of 275 kPa.
pressure	DO NOT apply using aerial application equipment.
Timing	Corn may be treated with a broadcast post-emergence application at the recommended rate from the 4-leaf stage onward. To ensure adequate coverage of weeds, drop pipes should be used when corn is beyond the 8-leaf stage or for a second application for later germinating weeds such as cocklebur and velvetleaf. Minimum re-treatment interval for the second application is 21 days. The pre-harvest interval (PHI) is 20 days.
Application rate	0.6–0.7 L/ha. (9.7 L treats 13.8–16.2 ha.) Use of the higher recommended rate will improve control when heavy infestations of weeds are present. IPCO BROTEX 480 Liquid Herbicide is a contact herbicide thus good
	coverage of the weeds is essential.

**Note:** Temporary crop injury in the form of leaf scorching may occur in adverse growing conditions (especially if applied during or after periods of cool and wet, or hot and humid weather conditions). DO NOT ADD OIL OR SURFACTANT.

IPCO BROTEX 480 Liquid Herbicide + atrazine	
Weeds Controlled	See Section 2, plus weeds indicated on the atrazine label.
Spray volume and	Apply in 200–300 L water per hectare at a pressure of 275 kPa.
pressure	DO NOT apply using aerial application equipment.
Timing	Corn should be treated from the 4- to 8-leaf stage. Refer to the
	ATRAZINE label for limitations on grassy weeds.
Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.6 L/ha (9.7 L treats 16.2 ha)
	tank-mixed with atrazine at 1.1–1.5 kg active ingredient per hectare. Add
	atrazine to the spray tank first, agitate well, and then add IPCO BROTEX
	480 Liquid Herbicide.

**Note:** Temporary crop injury in the form of leaf scorching may occur in adverse growing conditions (especially if applied during or after periods of cool and wet, or hot and humid weather conditions). DO NOT ADD OIL OR SURFACTANT, OR USE ATRAZINE FORMULATIONS CONTAINING OIL. Refer to the atrazine label for instructions, precautions and limitations (especially on crop restrictions the following year).

IPCO BROTEX 480 Liquid Herbicide + low rate atrazine	
Weeds Controlled	See Section 2, plus seedlings up to 6-leaf stage: redroot pigweed (triazine
	susceptible), velvet leaf*; seedlings up to 8-leaf stage: common ragweed.
	* Spray before weed reaches 10 cm in height.
Spray volume and	Apply in 200–300 L water per hectare at a pressure of 275 kPa.
pressure	DO NOT apply using aerial application equipment.
Timing	Corn may be treated with a broadcast post-emergence application at the
	recommended rate from the 4-leaf stage onward. To ensure adequate

coverage of weeds, drop pipes should be used when corn is beyond the 8-
leaf stage or for a second application for later germinating weeds such as
cocklebur and velvetleaf. Minimum re-treatment interval for the second
application is 21 days. The pre-harvest interval (PHI) is 20 days.

Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.6–0.7 L/ha (9.7 L treats 13.8–
	16.2 ha) tank-mixed with atrazine at 0.5 kg active ingredient per hectare.
	Add atrazine to the spray tank first, agitate well and then add IPCO
	BROTEX 480 Liquid Herbicide.

**Note:** Temporary crop injury in the form of leaf scorching may occur in adverse growing conditions (especially if applied during or after periods of cool and wet, or hot and humid weather conditions). DO NOT ADD OIL OR SURFACTANT, OR USE ATRAZINE FORMULATIONS CONTAINING OIL.

IPCO BROTEX 480 Liquid Herbicide + BANVEL® or BANVEL II (Do not use on sweet corn)	
Weeds Controlled	See Section 2, plus weeds indicated on the BANVEL II OR BANVEL labels.
Spray volume and pressure	Apply in 200–300 L water per hectare at a pressure of 275 kPa. DO NOT apply using aerial application equipment.
Timing	Field corn should be treated from the 4- to 6-leaf stage as an overall broadcast treatment. Drop pipes should be used when applying to corn over the 6-leaf stage and up to 50 cm; direct drop pipe nozzles on the weeds beneath the corn leaves. Apply no later than 2 weeks prior to tassel emergence and do not apply to corn over 50 cm in height.
Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.6 L/ha (9.7 L treats 16.2 ha) tank-mixed with BANVEL or BANVEL II at 290 mL/ha. Add IPCO BROTEX 480 Liquid Herbicide to the spray tank first, agitate well and then add BANVEL or BANVEL II.

#### SECTION 7 - FIELD CORN (do not use on sweet corn)

**Note:** Temporary crop injury in the form of leaf scorching may occur in adverse growing conditions (especially if applied during or after periods of cool and wet, or hot and humid weather conditions). Refer to the BANVEL or BANVEL II label guide for instructions, precautions and limitations. DO NOT ADD OIL OR SURFACTANT.

IPCO BROTEX 480 Liquid Herbicide + ULTIM® 75 DF + Non-Ionic Surfactant (Field		
Corn Only, Eastern	Corn Only, Eastern Canada)	
Weeds Controlled	See Section 2, plus weeds indicated on the ULTIM 75DF label.	
Spray volume and	Apply in 200–300L water per hectare at a pressure of 275 kPa by ground	
pressure	only.	
	DO NOT apply using aerial application equipment.	
Timing	Corn should be treated from the 4- to 6-leaf stage (up to 4 visible collars	
	or 30 cm in height—leaf extended). Refer to the ULTIM 75DF label for	
	further limitations and precautions.	
Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.6 L/ha (9.7 L treats 16.2 ha)	
	tank-mixed with ULTIM 75DF at 33.7 g/ha (one water soluble bag) and a	
	recommended non-ionic surfactant such as AG-SURF II at 2 L per 1000 L	
	spray solution (0.2% v/v).	

**NOTE:** Apply this tank-mix ONLY when the temperature in the 24 hours before *and* after application ranges between 5°C and 28°C. Temperatures beyond this range increase the potential

for crop injury. Separate applications of ULTIM 75DF followed by IPCO BROTEX 480 Liquid Herbicide (minimum 12 hours later) will reduce the potential for injury. Refer to the ULTIM 75DF label for additional information on Environmental Conditions and Biological Activity. **MIXING:** Fill the tank about ¼ full with clean water. Turn on full agitation. Add the required amount of ULTIM 75DF and agitate thoroughly until water soluble bags are completely dissolved and product is fully dispersed. Add the required amount of IPCO BROTEX 480 Liquid Herbicide, followed by a recommended non-ionic surfactant while agitating. Fill the remainder of the spray tank. Refer to the ULTIM 75DF label for further limitations and precautions on mixing instructions and sprayer cleanup.

IPCO BROTEX 480 Liquid Herbicide + atrazine + ULTIM 75 DF + Non-Ionic Surfactant	
(Field Corn Only, Eastern Canada)	
Weeds Controlled	See Section 2, plus weeds indicated on the atrazine and ULTIM 75 DF
	label.
Spray volume and	Apply in 200–300L water per hectare at a pressure of 275 kPa by ground
pressure	only. DO NOT apply using aerial application equipment.
Timing	Corn should be treated from the 3- to 6-leaf stage (up to 4 visible collars
	or 30 cm in height—leaf extended). Refer to the ULTIM 75DF label for
	further limitations and precautions.
Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.3 L/ha (9.7 L treats 32.4 ha)
	tank-mixed with atrazine at 0.5 kg active ingredient per hectare tank-
	mixed with ULTIM 75DF at 33.7 g/ha (one water soluble bag) and a
	recommended non-ionic surfactant such as AG-SURF II at 2 L per 1000 L
	spray solution (0.2% v/v).

**NOTE:** Apply this tank-mix ONLY when the temperature in the 24 hours before *and* after application ranges between 5°C and 28°C. Temperatures beyond this range increase the potential for crop injury. Separate applications of ULTIM 75DF followed by IPCO BROTEX 480 Liquid Herbicide (minimum 12 hours later) will reduce the potential for injury. Refer to the ULTIM 75DF label for additional information on Environmental Conditions and Biological Activity. **MIXING:** Fill the tank about 1/4 full with clean water. Turn on full agitation. Add the required amount of ULTIM 75DF and agitate thoroughly until water soluble bags are completely dissolved and product is fully dispersed. Add the required amount of Atrazine and agitate thoroughly again. Add the required amount of IPCO BROTEX 480 Liquid Herbicide, followed by a recommended non-ionic surfactant while agitating. Fill the remainder of the spray tank. Please refer to the ULTIM 75DF label for further limitations and precautions on mixing instructions and sprayer cleanup.

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than Interprovincial Cooperative Ltd. under the User Requested Minor Use Label Expansion program. For these uses, Interprovincial Cooperative Ltd. has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) under all environmental conditions or for all crop varieties when used in accordance with the label. The user should test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application.

#### IPCO BROTEX 480 LIQUID HERBICIDE + ACCENT 75 DF + NON-IONIC SURFACTANT - FIELD CORN (EASTERN CANADA AND PRAIRIE PROVINCES)

Weeds Controlled	See Section 2, plus weeds indicated on the ACCENT 75 DF label.
Spray volume and	Apply in a minimum of 100 L water per hectare at a pressure of 275 kPa
pressure	by ground only. DO NOT apply using aerial application equipment.
Timing	Apply as a single post-emergent spray. Apply post-emergence to corn
	when at the 4- to 8-leaf stage (2–6 visible collars). Do not apply prior to
	the 4-leaf (2 visible collars) or after the 8-leaf (6 visible collars) stage of
	corn. Observe a PHI of 30 days. Refer to the ACCENT 75 DF label for
	further limitations and precautions.
Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.6 L/ha (9.7 L treats 16.2 ha)
	tank-mixed with ACCENT 75 DF at 33.4 g/ha and a recommended non-
	ionic surfactant such as AG-SURF II at 2 L per 1000 L spray solution
	(0.2% v/v).

#### **SECTION 8 - FALL RYE (not under-seeded to legumes)**

IPCO BROTEX 480 Liquid Herbicide used ALONE		
Weeds Controlled	See Section 2.	
Spray volume and	Apply in 100 L water per hectare at a pressure of 275 kPa.	
pressure	DO NOT apply using aerial application equipment.	
Timing	Fall rye may be treated from the time growth begins to the early flag leaf	
	stage in the spring.	
Application rate	0.6–0.7 L/ha. (9.7 L treats 13.8–16.2 ha.) If weeds are beyond the leaf	
	stages indicated or under adverse growing conditions, use of the higher	
	recommended rate will improve control	

IPCO BROTEX 480 Liquid Herbicide + MCPA	
See Section 2 under IPCO Brotex 480 Liquid Herbicide + MCPA	
Apply in 50–100 L water per hectare at a pressure of 275 kPa.	
DO NOT apply using aerial application equipment.	
Fall rye may be treated from the time growth begins to the early flag leaf	
stage in the spring.	
IPCO BROTEX 480 Liquid Herbicide at 0.6 L/ha (9.7 L treats 16.2 ha)	
tank-mixed with 275 g active ingredient MCPA per hectare where	
indicated. Refer to the mixing tables at end of book for correct volume of	
MCPA.	

**Note:** MCPA ester is preferred although other formulations may be used. Add MCPA to the spray tank first, agitate, then add IPCO BROTEX 480 Liquid Herbicide. Refer to the MCPA label for precautions and limitations.

#### **SECTION 9 - FLAX (including low linolenic acid varieties)**

IPCO BROTEX 480 Liquid Herbicide used ALONE		
Weeds Controlled	See Section 2	
Spray volume and	Apply in 100 L water per hectare at a pressure of 275 kPa.	
pressure	DO NOT apply using aerial application equipment.	
Timing	Flax may be treated from the time it is 5 cm high up to the early flower	
	bud stage but for best results apply IPCO BROTEX 480 Liquid Herbicide	
	when flax is 5–10 cm high.	
Application rate	0.6 L/ha. (9.7 L treats 16.2 ha.)	

Note: Spraying in the evening may reduce risk of flax injury.

**Warning:** Do not spray unthrifty crops or when plants are under stress. Do not spray in periods of hot, humid weather. Observe a minimum interval to harvest of 60 days after application of IPCO BROTEX 480 Liquid Herbicide.

Flax is less tolerant of this product than are the cereal crops. Some leaf burn and retarded growth may delay maturity 2–3 days. Avoid using IPCO BROTEX 480 Liquid Herbicide when flax is under stress or during hot (over 29°C) humid weather as severe crop injury may occur.

IPCO BROTEX 480 Liquid Herbicide + MCPA or MCPA-K		
Weeds Controlled	See Section 2 under IPCO Brotex 480 Liquid Herbicide + MCPA mixture	
Spray volume and	Apply in 100 L water per hectare at a pressure of 275 kPa.	
pressure	DO NOT apply using aerial application equipment.	
Timing	Flax may be treated from the time it is 5 cm high up to the early flower	
	bud stage but for best results apply IPCO BROTEX 480 Liquid Herbicide	
	when flax is 5–10 cm high.	
Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.6 L/ha (9.7 L treats 16.2 ha)	
	tank-mixed with MCPA or MCPA-K at 275 g a.i./ha. Follow all	
	precautions, limitations and timing recommendations on MCPA labels.	
	The amine, ester or K-salt formulations of MCPA can be used in tank-	
	mixtures.	

Note: Spraying in the evening may reduce risk of flax injury.

**Warning:** Do not spray unthrifty crops or when plants are under stress. Do not spray in periods of hot, humid weather. Observe a minimum interval to harvest of 60 days after application of IPCO BROTEX 480 Liquid Herbicide.

Flax is less tolerant of this product than are the cereal crops. Some leaf burn and retarded growth may delay maturity 2–3 days. Avoid using IPCO BROTEX 480 Liquid Herbicide when flax is under stress or during hot (over 29°C) humid weather as severe crop injury may occur.

#### SECTION 10 - CANARY SEED (Phalaris canariensis; for seed production)

IPCO BROTEX 480 Liquid Herbicide used ALONE	
Weeds Controlled	See section 2.
Spray volume and	Apply in 100 L water per hectare at a pressure of 275 kPa.
pressure	DO NOT apply using aerial application equipment.
Timing	The crop may be treated from the 3- to 5-leaf stage.
Application rate	0.6 L/ha. (9.7 L treats 16.2 ha.)

IPCO BROTEX 480 Liquid Herbicide + MCPA		
Weeds Controlled	See Section 2 under IPCO Brotex 480 Liquid Herbicide + MCPA mixture	
Spray volume and	Apply in 50–100 L water per hectare at a pressure of 275 kPa.	
pressure	DO NOT apply using aerial application equipment.	
Timing	The crop may be treated from the 3- to 5-leaf stage.	
Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.6 L/ha (9.7 L treats 16.2 ha)	
	tank-mixed with 275 g active ingredient MCPA per hectare. Refer to the	
	table at end of book for correct volume of MCPA.	

**Note:** MCPA ester is preferred although other formulations may be used. Add MCPA to the spray tank first, agitate, then add IPCO BROTEX 480 Liquid Herbicide. Refer to the MCPA label for precautions and limitations.

#### **SECTION 11 – TRITICALE**

IPCO BROTEX 480 Liquid Herbicide used ALONE		
Weeds Controlled	See section 2.	
Spray volume and	Apply in 100 L water/ha at a pressure of 275 kPa.	
pressure	DO NOT apply using aerial application equipment.	
Timing	The crop may be treated from the 2-leaf until the early flag leaf stage.	
Application rate	0.6–0.7 L/ha. (9.7 L treats 13.8–16.2 ha.) If weeds are beyond the leaf	
	stage indicated or under adverse growing conditions, use of the higher	
	recommended rate will improve control.	

#### **SECTION 12 – GARLIC**

IPCO BROTEX 480 Liquid Herbicide used ALONE		
Weeds Controlled	See Section 2.	
Spray volume and	Apply in 200–300 L water per hectare at a pressure of 275 kPa.	
pressure	DO NOT apply using aerial application equipment.	
Timing	Apply early post emergent to weeds by ground application only. One	
	application per year. Observe a PHI of 58 days.	
Application rate	0.6 L/ha. (9.7 L treats 16.2 ha.)	

#### SECTION 13 - ONION (dry bulb only)

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than Interprovincial Cooperative Ltd. under the User Requested Minor Use Label Expansion program. For these uses, Interprovincial Cooperative Ltd. has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) under all environmental conditions or for all crop varieties when used in accordance with the label. The user should test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application.

	Spray Volume	Timing	Application Rate
	and Pressure		
BROTEX	Apply in 200 L	Make two applications per	Apply BROTEX 480 EC twice
480 used	water per	season, at an interval of 10 to	per season, each time at a rate
alone	hectare at a	18 days. The first application	of 0.3 L/ha
	pressure of 170	should be made when onions	Application Precaution:
	kPa.	are at the 2- to 3-leaf stage, and	BROTEX 480 EC may cause
		the second application made	severe leaf burn in onions if
		when onions are at the 4- to 5-	weather conditions have not
		leaf stage. DO NOT harvest	been conducive to the
		within 75 days of application.	development of the outer waxy
			layer of the onion leaf.
WEEDS CONTROLLED			
Seedlings up to 4-leaf		Redroot pigweed, common groun	ndsel.
stage:			

#### SECTION 14 - SEEDLING and ESTABLISHED ALFALFA (seed production only) PROVINCES OF ALBERTA, SASKATCHEWAN, MANITOBA ONLY

<b>IPCO BROTEX 480</b>	) Liquid Herbicide used ALONE	
Weeds Controlled	See Section 2.	
Spray volume and	Apply in 100 L water/ha at a pressure of 275 kPa. Ground application	
pressure	only.	
	DO NOT apply using aerial application equipment.	
Timing	Seedling alfalfa – From the 2 to 6 trifoliate leaf stage. Do not apply to	
	seedlings under stress	
	Established alfalfa may be treated until alfalfa is 25 cm tall. Maximum of	
	2 applications per year. Minimum re-treatment interval for the second	
	application is 21 days.	
Application rate	Seedling - 0.6 L/ha. (9.7 L treats 16.2 ha.)	
	Established for seed $-0.6 - 0.7$ L/ha (9.7 L treats 13.8–16.2 ha.) If weeds	
	are beyond the leaf stage indicated or under adverse growing conditions,	
	use of the higher recommended rate will improve control.	

**Note:** Use of this product may cause temporary leaf scorch or foliar burn in adverse growing conditions, especially if applied during or after periods of cool and wet, or hot and humid weather conditions. Do not apply if crop is under stress. Do not apply to alfalfa seedlings in the unifoliate or 1<sup>st</sup> trifoliate leaf stage. Avoid overlapping as severe crop injury may occur. In established stands - crop will recover and yield will not be affected.

# SECTION 15 - PRE-SEED/PRE-PLANT APPLICATION PRIOR TO SEEDING CANOLA

IPCO BROTEX 480 Liquid Herbicide + RoundUp WeatherMAX<sup>®</sup> with Transorb 2 Technology Liquid Herbicide

recimology Elquid Heibicide		
Weeds Controlled	Volunteer canola (all types) in addition to weeds listed in Section 2 of this	
	label, plus annual* and perennial** weeds controlled on the RoundUp	
	WeatherMAX with Transorb 2 Technology Liquid Herbicide label.	
Spray volume and	Apply in 100 L of <b>clean</b> water per hectare at a pressure of 275 kPa. DO	
pressure	NOT apply using aerial application equipment.	
Timing	Application can be made up to one day prior to seeding. DO NOT apply	
	after seeding or crop emergence.	
Application rate	Apply IPCO BROTEX 480 Liquid Herbicide at 730 mL/ha tank mixed	
	with Roundup WeatherMAX with Transorb 2 Technology Liquid	
	Herbicide at 0.83 -1.27 L/ha (annual weeds*) or 1.67-3.33 L/ha (perennial	
	weeds**) prior to the planting of canola. IPCO BROTEX 480 Liquid	
	Herbicide should be added to the spray tank first and the RoundUp	
	WeatherMAX with Transorb 2 Technology Liquid Herbicde added last.	

\*,\*\* Refer to RoundUp WeatherMAX with Transorb 2 Technology Liquid Herbicide label for complete information on weeds controlled, rates, precautions, registered crop species, mixing and instructions. Follow the most restrictive label for the application of this tank-mix.

#### SECTION 16 - MINIMUM OR ZERO TILL

IPCO BROTEX 480 Liquid Herbicide + glyphosate herbicide*		
Weeds Controlled	See Section 2, plus weeds controlled on glyphosate labels	
Spray volume and	Apply in 100 L of <b>clean</b> water per hectare at a pressure of 275 kPa.	
pressure	DO NOT apply using aerial application equipment.	
Timing	This recommendation applies only to minimum or zero till situations	
	<b>before</b> emergence of the crop. Application can be made just prior to or immediately after seeding. Under no circumstances should application be made after crop emergence. Weeds in the seedling stage are most susceptible. This treatment should only be used for minimum or zero-tillage cropping	
	systems in wheat, barley and oats.	
Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.6 L/ha (9.7 L treats 16.2 ha) tank-mixed with glyphosate. Refer to individual glyphosate labels for rates and registered crop species. A non-ionic surfactant is recommended for use with glyphosate. IPCO BROTEX 480 Liquid Herbicide should be added to the spray tank first, agitate then add glyphosate, agitate and then add surfactant.	

\*Note: Glyphosate herbicide (present as potassium salt, isopropylamine salt, ammonium salt, mono-ammonium salt, diammonium salt, dimethylamine salt or trimethylsulfonium salt) may be tank-mixed with IPCO BROTEX 480 Liquid Herbicide for use in minimum or zero tillage systems. Follow the most restrictive label for the application of this tank-mix.

#### SECTION 17 – SUMMER FALLOW

IPCO BROTEX 480 Liquid Herbicide + glyphosate herbicide*							
Weeds Controlled	See Section 2, plus weeds controlled on glyphosate labels						
Spray volume and	Apply in 100 L of <b>clean</b> water per hectare at a pressure of 275 kPa.						
pressure	DO NOT apply using aerial application equipment.						
Timing	Ensure weeds are at the desired growth stage and actively growing at application for best results. Reduced control may result if weeds are						
	drought stressed. Weeds will continue to germinate from seed throughout						
	the growing season. Repeat treatments may be necessary to control later						
	germinating weeds.						
Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.6 L/ha (9.7 L treats 16.2 ha)						
	tank-mixed with glyphosate. Refer to individual glyphosate labels for						
	rates. A non-ionic surfactant is recommended for use with glyphosate.						
	IPCO BROTEX 480 Liquid Herbicide should be added to the spray tank						
	first, agitate then add glyphosate, agitate and then add surfactant.						

\*Note: Glyphosate herbicide (present as potassium salt, isopropylamine salt, ammonium salt, mono-ammonium salt, diammonium salt, dimethylamine salt or trimethylsulfonium salt) may be tank-mixed with IPCO BROTEX 480 Liquid Herbicide for use in summer fallow. Follow the most restrictive label for the application of this tank-mix.

#### SECTION 18 - SEEDLING GRASSES (not under-seeded to legumes)

IPCO BROTEX 480 Liquid Herbicide used ALONE					
Weeds Controlled	See Section 2.				
Spray volume and	Apply in 150 L water per hectare at a pressure of 275 kPa.				
pressure	DO NOT apply using aerial application equipment.				
Timing	Seedling grasses may be treated from the 2- to 4-leaf stage.				
Application rate	0.6–0.7 L/ha. (9.7 L treats 13.8–16.2 ha.) If weeds are beyond the leaf				
	stage indicated or under adverse growing conditions, use of the higher				
	recommended rate will improve control.				

**Note:** Grasses grown for seed production in the year of establishment only. **Crops:** Brome grass, crested wheat grass, intermediate wheat grass, slender wheat grass, tall wheat grass, Russian wild rye, timothy, orchard grass, creeping red fescue, meadow fescue, reed canary grass.

<b>IPCO BROTEX 480</b>	) Liquid Herbicide + MCPA
Weeds Controlled	See Section 2 under IPCO Brotex 480 Liquid Herbicide + MCPA mixture
Spray volume and	Apply in 150 L water per hectare at a pressure of 275 kPa.
pressure	DO NOT apply using aerial application equipment.
Timing	Seedling grasses may be treated from the 2- to 4-leaf stage.
Application rate	IPCO BROTEX 480 Liquid Herbicide at 0.6 L/ha (9.7 L treats 16.2 ha) tank-mixed with 275 g active ingredient MCPA per hectare. Refer to the
	table at end of book for correct volume of MCPA.

**Note:** MCPA ester is preferred although other formulations may be used. Add MCPA to the spray tank first, agitate, then add IPCO BROTEX 480 Liquid Herbicide. Refer to the MCPA label for precautions and limitations.

#### SECTION 19 - FORAGE SORGHUM AND FORAGE MILLET

IPCO BROTEX 480 Liquid Herbicide used ALONE					
Weeds Controlled	See Section 2.				
Spray volume and	Apply in 200–300 L water per hectare at a pressure of 275 kPa.				
pressure	DO NOT apply using aerial application equipment.				
Timing	Apply when the crop is at or beyond the 4-leaf stage and less than 20 cm				
	in height by ground application only. One application per year. Observe a				
	PHI of 30 days.				
Application rate	0.6 L/ha. (9.7 L treats 16.2 ha.)				

#### **SECTION 20 – NOTICE**

**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.

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### **SECTION 21 - MIXING TABLE:**

For calculating the amount of product to add to the spray tank when applying 100 L spray solution per hectare.

		IPCO BROTEX 480 Liquid Herbicide (480 g/L)		MCPA AMINE 500 or MCPA ESTER 500		МСРА- К 400		MCPA SODIUM SALT 300	
Rate active per hectare Rate product per hectare		280 g 0.6 L	340 g 0.7 L	275 g 550 mL	550 g 1.1 L	275 g 690 mL	550 g 1.38 L	275 g 920 mL	550 g 1.83 L
Size of sp	ray tank					d to spray tank (			
Gallons	Litres	-							
500	2273	13.6	15.9	12.5	25.0	15.7	31.4	20.9	41.6
400	1818	10.9	12.75	10.0	20.0	12.5	25.0	16.7	33.3
350	1591	9.55	11.15	8.75	17.5	11.0	22.0	14.6	29.2
300	1363	8.15	9.5	7.5	15.0	9.4	18.8	12.5	25.0
250	1136	6.8	7.95	6.25	12.5	7.8	15.7	10.5	20.8
200	909	5.45	6.35	5.0	10.0	6.25	12.5	8.4	16.6
100	455	2.7	3.15	2.5	5.0	3.2	6.3	4.2	8.4
50	227	1.35	1.6	1.25	2.5	1.6	3.2	2.1	4.2
22	100	0.6	0.7	550 mL	1.1	690 mL	1.38	920 mL	1.8
10	45	270 mL	315 mL	250 mL	500 mL	310 mL	620 mL	420 mL	820 mI
Ι		IPCO BROTEX 480 Liquid Herbicide (480 g/L)		2,4-D AMINE 500		2,4-D 600 LV ESTER		2,4-D 700 LV ESTER	
	Rate active per hectare		340 g	275 g		275 g		275 g	
Rate product		0.6 L	0.7 L	550 mL		458 mL		393 mL	
Size of sp		-		Litres of cl	nemical to add	to the spray tan	k (approx.)		
Gallons	Litres				i i i i i i i i i i i i i i i i i i i		("PProm)		
500	2273	13.6	15.9	12.5		10.4		8.9	
400	1818	10.9	12.75	10.0		8.3		7.1	
350	1591	9.55	11.15	8.75		7.3		6.25	
300	1363	8.15	9.5	7.5		6.25		5.4	
250	1136	6.8	7.95	6.25		5.2		4.5	
200	909	5.45	6.35	5.0		4.2		3.6	
100	455	2.7	3.15	2.5		2.1		1.8	
50	227	1.35	1.6	1.25		1.0		890 mL	
22 10	100	0.6	0.7	550 mL		458 mL		390 mL	
	45	270 mL	315 mL	250 mL		210 mL		180 mL	

# IPCO® BROTEX®480

## LIQUID HERBICIDE

CONTAINS BROMOXYNIL

For use in WHEAT (Spring and Winter), BARLEY, OATS, FLAX (including low linolenic acid varieties), CORN, FALL RYE, CANARY SEED (for seed production), TRITICALE, GARLIC, ONION (dry bulb only), SEEDLING ALFALFA, ESTABLISHED ALFALFA (for seed production only), and SEEDLING GRASSES, FORAGE SORGHUM, FORAGE MILLET, as a pre-seed/pre-plant application prior to planting CANOLA, ZERO TILL and SUMMER FALLOW

AGRICULTURAL READ THE LABEL AND BOOKLET BEFORE USING

ACTIVE INGREDIENT: BROMOXYNIL (present as the octanoate

ester): 480 g/L REGISTRATION NO: 31348 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 9.7 litres



#### WARNING EYE IRRITANT

#### INTERPROVINCIAL COOPERATIVE LIMITED P.O. BOX 1050, SASKATOON, SASKATCHEWAN S7K 3M9 1-204-233-3461

<sup>®</sup>T.M. Reg'd.

RC 538-0814