GROUP 13 HERBICIDE

IPCO Clomazone HERBICIDE

Microcapsule Suspension

COMMERCIAL

A selective microencapsulated suspension for use in Eastern Canada for pre-emergent weed control in soybeans, field cucumbers, melons, squash (including processing pumpkins) and for post-transplant application in field sweet potatoes. Also for use in Eastern Canada and Manitoba for pre-emergent application in peppers.

For use nationally for pre-plant application in herbicide-tolerant canola and pre-emergent application in asparagus, cilantro, and dry beans.

Contains 1,2-benzisothiazolin-3-one at 0.004 % as a preservative OR

Contains bronopol at 0.00176%, 5-chloro-2-methyl-4-isothiazolin-3-one at 0.00017% and 2-methyl-4-isothiazolin-3-one at 0.000056% as preservatives

Contains 5-chloro-2-methyl-4-isothiazolin-3-one at 0.00022% and 2-methyl-4-isothiazolin-3-one at 0.000074% as preservatives.

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



POTENTIAL EYE AND SKIN IRRITANT POTENTIAL SKIN SENSITIZER

REGISTRATION NO.: 33910 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 1 L - 1000 L

Interprovincial Cooperative Limited, P.O. Box 1050, Saskatoon, Saskatchewan S7K 3M9 1-204-233-3461

FOR 24-HOUR MEDICAL/CHEMICAL EMERGENCY ASSISTANCE CALL 1-888-CAN-UTEC (226-8832)

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

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center 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.

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

TOXICOLOGICAL INFORMATION

Treat symptomatically.

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN

Harmful if swallowed or absorbed through the skin. Irritating to eyes and skin. Potential skin sensitizer.

Avoid breathing vapour or mist. Avoid contact with eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Personal Protective Equipment (PPE):

During mixing, loading, cleanup, repair and application wear long-sleeved shirt, long pants, chemical resistant gloves and shoes plus socks.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/ maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Wear freshly laundered clothes daily. Clothing should be washed separately from household laundry, before reuse.
- Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

RESTRICTIONS

Do not apply more than one application per season.

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high-water mark. Do not apply when weather conditions favor drift from the area treated. Do not apply where runoff is likely to occur. Do not contaminate any body of water by direct application, cleaning of equipment or disposal of waste. DO NOT APPLY IPCO Clomazone THROUGH ANY TYPE OF IRRIGATION EQUIPMENT.

DO NOT apply using aerial application equipment

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

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

ENVIRONMENTAL PRECAUTIONS

This product is toxic to aquatic organisms. Do not apply directly to surface waters or wetlands. Do not apply to areas where runoff is likely to occur. Do not contaminate any body of water by direct application, cleaning of equipment or disposal of wastes. Do not apply when weather conditions favor drift from the treated area. Foliar contact with spray or vapours may cause foliar whitening or yellowing of sensitive plants. Symptoms are generally temporary but may persist in some plant species.

GRAZING/FEEDING RESTRICTION

Do not graze the treated crop or cut for hay; sufficient data are not available to support such use.

STORAGE

If possible, store above 5°C to keep product from freezing. If frozen, thaw before use. If solid crystals are observed, warm material to above 15 °C by placing container in warm location. Shake or roll container periodically to redissolve solids.

Do not use or store near heat or open flame.

Store in original containers only. Store in a dry location. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

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/territorial requirements.

For returnable containers:

DO NOT reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

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.

Disposal of unused, unwanted product:

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

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WARNING

APPLY THIS PRODUCT ONLY AS SPECIFIED ON THIS LABEL. FAILURE TO FOLLOW LABEL INSTRUCTIONS MAY RESULT IN ERRATIC WEED CONTROL OR CROP DAMAGE. READ ALL DIRECTIONS CAREFULLY BEFORE APPLYING. Do not apply to peat or muck soils or any containing more than 10% organic matter. If IPCO Clomazone is to be applied to fields spread with manure, ensure that the manure has been thoroughly disintegrated and mixed into the soil to a depth of 10-15 cm before IPCO Clomazone application.

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 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.

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If inhaled:_Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

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

TOXICOLOGICAL INFORMATION

Treat symptomatically.

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN

Harmful if swallowed or absorbed through the skin. Irritating to eyes and skin. Potential skin sensitizer.

Avoid breathing vapour or mist. Avoid contact with eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Personal Protective Equipment (PPE):

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

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

- Wear freshly laundered clothes daily. Clothing should be washed separately from household laundry, before reuse.
- Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

RESTRICTIONS

Do not apply more than one application per season.

Do not apply when weather conditions favor drift from the area treated. DO NOT APPLY IPCO Clomazone THROUGH ANY TYPE OF IRRIGATION EQUIPMENT.

DO NOT apply by air

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

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

Foliar contact with spray or vapours may cause foliar whitening or yellowing of sensitive plants. Symptoms are generally temporary but may persist in some plant species.

ENVIRONMENTAL PRECAUTIONS

Toxic to aquatic organisms. Observe spray buffer zones specified under DIRECTIONS FOR USE.

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

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative filter strip between the treated area and the edge of the water body.

GRAZING/FEEDING RESTRICTION

Do not graze the treated crop or cut for hay; sufficient data are not available to support such use.

STORAGE

Store this product away from food or feed. If possible, store above 5oC to keep product from freezing. If frozen, thaw before use. If solid crystals are observed, warm material to above 15 °C by placing container in warm location. Shake or roll container periodically to redissolve solids. Do not use or store near heat or open flame.

Store in original containers only. Store in a dry location. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

DISPOSAL

For recyclable containers:

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

For returnable containers:

DO NOT reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

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.

Disposal of unused, unwanted product:

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

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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.

<u>Field sprayer application</u>: **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 S572.1) coarse classification. Boom height must be 60 cm or less above the crop or ground.

APPLICATION AND DRIFT PRECAUTIONS

- DO NOT apply more than one application per season
- DO NOT apply during periods of dead calm or when winds are gusty.
- **DO NOT apply by air** Use ground equipment only.
- IPCO Clomazone must be applied as per the directions on this label.
- Failure to properly apply IPCO Clomazone may result in off-target movement of this product.
- Plants sensitive to foliar damage from IPCO Clomazone are listed in the following table:

Trees: Fruit trees, cherry (fruit, black, pin, choke)*, poplar*, willow*, ash, maple, basswood, walnut, elm, ornamentals, hickory, and spruce

Vegetables and Flowers: All

Cereal Crops: Wheat, oats, barley, winter wheat, rye, and triticale

Forage Crops: Alfalfa

Shrubs and Vines: Ornamentals, raspberry*, grapes*, roses*, and strawberry

Off-target movement of IPCO Clomazone may occur either directly through spray drift at the time of application, or through the volatilization of applied product and subsequent vapour drift. **OFF-TARGET DRIFT OF IPCO Clomazone MUST BE AVOIDED TO PREVENT FOLIAR DAMAGE TO NEIGHBORING VEGETATION**.

^{*}Extremely sensitive plants

SPRAY DRIFT MITIGATION MEASURES

Spray drift is influenced by many factors, including wind speed, spray pressure, particle size, nozzle type, and applicator boom height. To minimize the risk of off-site migration from spray drift:

- Use a low sprayer pressure **Do not exceed 207kPa spray pressure**.
- Select an operating pressure and volume that meet a droplet size classification of coarse or greater.

Consider using low-drift nozzles.

- Do not apply during periods of dead calm, or when winds are gusty or in excess of 16 km/hr
- Minimize sprayer boom height while maintaining a uniform spray pattern.
- Apply during calmer periods of the day (e.g., early morning or late in day).
- Do not apply during a temperature inversion (see text on **TEMPERATURE INVERSIONS**).

SPRAY BUFFER ZONES

To mitigate against off-site movement of spray drift, observe buffer zones specified under 'VAPOUR DRIFT MITIGATION'. The specified spray buffer zones 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). For. When tank mixes are permitted, consult the labels of the tank-mix partners and observe the largest (most restrictive) spray buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. Their presence can be indicated by ground fog, or characterized by lateral movement of smoke layers in a concentrated cloud. Application should be avoided during temperature inversions, as insufficient vertical mixing may result in off-target movement of IPCO Clomazone.

VAPOUR DRIFT MITIGATION

IPCO Clomazone will volatilize from soils. To minimize the risk of off-site movement of vapours:

- Do not apply IPCO Clomazone when air temperatures exceed 25° C.
- DO NOT SPRAY IPCO Clomazone WITHIN 90 metres OF SENSITIVE PLANTS or SENSITIVE TERRESTRIAL HABITATS.
- DO NOT APPLY IPCO Clomazone WITHIN 370 metres OF THE FOLLOWING AREAS:
 - Residential areas of towns and subdivisions
 - Areas of established vegetable production
 - o Fruit production, commercial nurseries, or greenhouses

ROTATIONAL CROPPING PRECAUTIONS

NOTE: When using IPCO Clomazone with other registered herbicides always refer to rotational restrictions and precautions on the other product's label.

Under some conditions, temporary whitening or yellowing of leaves may occur on approved rotational crops where undesirable soil residues of IPCO Clomazone exist.

Under abnormal conditions, carryover injury to rotational crops can occur. The following factors can contribute to increased risk of injury to rotational crops:

- 1. Exceeding label recommended rates.
- 2. Overapplication resulting from use of worn nozzles, excessive overlapping of spray swaths, failing to shut off spray booms when turning (end row areas), or slowing or stopping sprayer.
- 3. Soil with pH less than or equal to 5.9.
- 4. Extreme dryness in the four months following application.
- 5. Choice of rotational crop hybrid.

Additional recommendations to prevent rotational crop injury may be provided in the form of service bulletins for locations where risk of injury is significantly increased due to extremely dry conditions.

Rate of IPCO Clomazone Applied	Plant Back Interval	Rotational Crops
	Immediately	Soybeans, spring canola, dry beans, mustard [brown, Oriental, yellow] Ethiopian mustard (Brassica carinata) and camelina
0.25 – 0.33 L/ha	4 months	Winter wheat
	Following spring	Beans (white, kidney, snap), corn (field, sweet), peas, peppers (transplant, plugs), broccoli (transplant, plugs), cucumbers, melons, pumpkins, squash, potatoes, spring wheat, durum wheat, spring barley, oats, lentils
	Immediately	Soybeans
0.78 - 2.35 L/ha	Following Spring	Beans (white, kidney, snap), corn (field, sweet), peas, peppers (transplant, plugs), broccoli (transplant, plugs), cucumbers, melons, pumpkins, squash, potatoes, spring canola, spring wheat
	16 months	All other crops

Under normal conditions, IPCO Clomazone will not harm approved crops grown in rotation. Compaction, non-uniform tillage, seedling disease, cold weather, deep planting, excessive moisture, or drought may weaken crop seedlings and increase risk of damage from IPCO Clomazone, resulting in delayed crop development or reduced yield. Drought conditions in the year prior to seeding rotational crops may result in higher levels of IPCO Clomazone in the soil. To reduce the possibility of injury to rotational crops, use good agronomic practices.

Use a well-maintained, properly calibrated sprayer set to apply IPCO Clomazone at recommended rates and water volumes. Do not exceed label recommended rates. Avoid overlapping or situations resulting in excessive application, which could result in crop and /or rotational crop injury.

SPRAYER CLEANUP

Failure to observe the following may injure sensitive plants or trees. Do not park, drain or flush equipment on or near sensitive trees or other plants. Avoid areas in which desirable plant roots may extend into flush and cleaning location. Do not rinse and clean in areas where the herbicide may be washed or moved into contact with plant roots. Do not contaminate any body of water.

After spraying IPCO Clomazone and before using sprayer equipment for any other applications, the sprayer must be thoroughly cleaned using the following procedure:

- 1. Drain sprayer tank, hoses, and spray boom. Use a high-pressure detergent wash to remove physical sediment and residues from the inside of the sprayer tank and thoroughly rinse. Then thoroughly flush all sprayer hoses, booms, and nozzles with clean water.
- 2. Prepare a sprayer cleaning solution by adding heavy-duty detergent or three litres of ammonia (containing at least 3% active) per 100 litres of clean water. Prepare sufficient cleaning solution to allow the operation of the spray system for a minimum of 15 minutes to thoroughly flush hoses, spray boom and spray nozzles.
- 3. Convenient and thorough cleaning of the sprayer can be achieved if the cleaning solution or fresh water is left in the spray tank, hoses, spray booms and spray nozzles overnight or during storage.
- 4. Drain the sprayer system. Rinse the tank with clean water and flush through the hoses, boom, and nozzles. Remove and clean spray tips and all strainers and screens separately in an ammonia solution.
- 5. When switching from water dilutions to applications utilizing crop oil or liquid fertilizer as a carrier, a small volume of crop oil or liquid fertilizer should be flushed through the tank, pump, hoses, and boom prior to the next use.
- 6. Properly dispose of all cleaning solution and rinsate, including crop oil or liquid fertilizer rinsate, in accordance with provincial guidelines and regulations.

GENERAL MIXING INSTRUCTIONS

Care must be taken when mixing IPCO Clomazone. Avoid mixing in areas adjacent to desirable plants.

It is important that spray equipment is clean and free of existing pesticide deposits before using this product. Follow the spray tank clean-out procedures specified on the label of the product previously applied before adding IPCO Clomazone to the tank.

IPCO Clomazone Alone: Mix IPCO Clomazone with water or liquid fertilizer in the following manner: Fill the spray tank one-half to three-fourths full of water or liquid fertilizer, add the proper amount of IPCO Clomazone, then add the rest of the water or liquid fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform spray mixture. Apply spray solution immediately after mixing.

TANK MIXES:

This product may be tank mixed with (a fertilizer or with) registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for

each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact Interprovincial Cooperative Limited at 1-204-233-3461 for information before applying any tank mix that is not specifically recommended on this label.

Tank Mixtures: Fill spray tank one-half to two-thirds full of water; with agitator operating add the recommended amount of ingredients using the following order:

- **W**ettable powders and dispersible granules
- Agitate tank mix thoroughly
- **M**icro-encapsulated suspensions (e.g. IPCO Clomazone)
- Liquid flowables and suspensions
- Emulsifiable concentrate formulations
 - Fill spray tank nearly full of water
- **G**lyphosate formulations
- Surfactants
 - Complete filling the spray tank to the desired level

Maintain agitation during filling, mixing and application. When using drift reducing agents, follow specific product label instructions for order of addition to spray tank.

GENERAL APPLICATION INSTRUCTIONS Ground Application Only

Use a well-maintained, properly calibrated sprayer set to apply IPCO Clomazone at recommended rates and water volumes. Apply IPCO Clomazone by ground equipment using a finished spray volume of 95 to 375 L of water per hectare. Coarse sprays are less likely to drift out of target area than fine sprays. See "APPLICATION AND DRIFT PRECAUTIONS" and "SPRAY DRIFT MITIGATION MEASURES" sections for specific recommendations to reduce spray drift. Do not exceed label recommended application rates. Avoid overlapping or situations resulting in excessive application, which could result in crop and/or rotational crop injury.

IPCO Clomazone may be used as a preemergent soil surface applied treatment from 30 days before planting to just prior to crop emergence. If field conditions indicate the need for additional seedbed preparation, the use of equipment, which will move the herbicide no deeper than 5 cm, is acceptable.

Crops growing under stress from adverse environmental conditions such as excess moisture, drought, disease, etc. or adverse agronomic practices such as poor seed placement, poor fertility, soil compaction, etc. may exhibit injury symptoms from IPCO Clomazone application. Such effects are often observed as transient whitening of crop leaves but under severe conditions may contribute to crop loss. Following good agronomic practices, as recommended by local provincial extension personnel, will reduce the risk of crop injury

RESTRICTIONS

Do not allow livestock to graze on treated soybean vines or feed treated vines or vine trash to livestock.

Banded Applications

Calculate the rates and volumes required by using the following formulas:

Band width

in centimetres

Row width
In
Centimeteres

Broadcast
X Rate Per
hectare

Band rate
per hectare

Band width
in centimetres

Row width
In
centimeteres

X

Broadcast
Volume
Per hectare

Per hectare

Band
Volume
per hectare

Cultivation After Planting

If cultivation is necessary because of soil crusting, compaction, or weed emergence, soil treated with IPCO Clomazone may be shallow-cultivated (no deeper than 5 cm) or rotary-hoed without reducing the weed control activity of IPCO Clomazone. Avoid deep cultivation which may bring untreated soil to the surface and result in poor weed control.

CROP-SPECIFIC USE DIRECTIONS

CANOLA (NATIO	NAL)
CROP	Canola
GENERAL INFORMATION	IPCO Clomazone is to be used as part of an integrated approach for the control of cleavers as a soil-applied preplant application in all Herbicide Tolerant canola varieties. Application of a post-emergence herbicide that is effective on cleavers, e.g. a herbicide to which the canola variety is tolerant, is recommended.
WEEDS CONTROLLED	Broadleaf weeds: • Cleavers (early-season control, suppression only at 0.25 L/ha)
WEEDS SUPRESSED	Broadleaf weeds: Common chickweed
APPLICATION TIMING	Apply as a single, soil-applied application prior to seeding canola and prior to weed emergence.
APPLICATION VOLUME	Apply in a minimum of 100 L of water per hectare.
APPLICATION RATES	Apply broadcast at a rate range of 0.25 - 0.33 L/ha. Application of 0.25 L/ha will suppress cleavers and can be used if cleaver populations are light.
RESTRICTIONS	DO NOT make more than one application per season. Apply prior to seeding canola. DO NOT incorporate IPCO Clomazone. DO NOT apply to sandy soil. Control may be reduced in high Organic Matter soils.

NOTES	Temporary whitening and/or yellowing of the crop may occur when emerging from the treated soil. If environmental conditions are unfavorable for plant growth (e.g., cool weather, extreme moisture, compacted soil, poor agronomic practices), the crop's ability to fully recover from this initial herbicide response may be negatively affected.
	Susceptible weed species may emerge from the soil but are devoid of pigmentation and plant death occurs in a short period of time. Suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated

	area. Competition by weeds listed as suppressed that remain in a crop will vary depending upon factors such as crop competition, weed biotype, the number of weed seeds in the soil and the time of weed emergence relative to crop emergence.
TANK MIXTURES	S – CANOLA (NATIONAL)
GENERAL INFORMATION	IPCO Clomazone may be tank mixed with the following herbicides to broaden the weed control spectrum. Do not incorporate tank mixtures of IPCO Clomazone and other products.
IPCO Clomazone	PLUS IPCO C-ZONE HERBICIDE TANK MIX
CROP	Canola
APPLICATION RATES AND WEEDS CONTROLLED	IPCO Clomazone: Rate: 0.25 - 0.33 L/ha Weeds controlled: • Cleavers (suppression only at 0.25 L/ha) Weeds suppressed: • Common chickweed IPCO C-ZONE Herbicide ^{1,2} : Rate: 36.5 mL/ha Weeds controlled: • Lambsquarters, common (up to 7.5 cm tall) • Morning glory (up to 3 leaves) • Nightshade, Eastern black (up to 5 cm tall) • Pigweed, redroot • Velvetleaf • Waterhemp, tall (up to 5 cm tall)
	Rate: 58 mL/ha Weeds controlled: all weeds controlled at 36.5 mL/ha rate plus: • Flixweed, • Lambsquarters, common • Mallow, round-leaved • Morning glory • Nightshade, hairy • Pennycress, field (stinkweed) • Pigweed, prostrate • Pigweed, smooth • Pigweed, tumble

	Purslane, common
	Smartweed, Pennsylvania (seedling)
	Mustard, tansy
	Waterhemp, tall
	Waterhemp, common
	Rate: 73 mL/ha
	Weeds controlled: all weeds controlled at 58 mL/ha rate plus:
	Carpetweed
	Cleavers
	Cocklebur
	Jimsonweed
	Kochia
	Nightshade, Eastern black
	Thistle, Russian (up to 5 cm tall),
	Shepherd's purse
	Canola, volunteer, including glyphosate-tolerant
	Rate: 117 mL/ha
	Weeds controlled: all weeds controlled by the 73 mL/ha rate plus:
	Burclover
	Lettuce, prickly
	Mallow, Venice (up to 5 cm tall)
	Spurry, corn
	DO NOT make more than one application per season
	DO NOT make more than one application per season. Apply prior to seeding canola.
RESTRICTIONS	DO NOT incorporate.
	DO NOT apply to sandy soil.
	Control may be reduced in high organic matter soils.
	Temporary whitening and/or yellowing of the crop may occur when emerging from the treated soil. If environmental conditions are unfavorable
	for plant growth (e.g., cool weather, extreme moisture, compacted soil, poor agronomic practices), the crop's ability to fully recover from this initial herbicide response may be negatively affected.
NOTES	Susceptible weed species may emerge from the soil but are devoid of pigmentation and plant death occurs in a short period of time.
	Suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Competition by weeds listed as suppressed that remain in a crop will vary depending upon factors such as crop competition, weed biotype, the number of weed seeds in the soil
	and the time of weed emergence relative to crop emergence.

	¹When used as directed, tank mixes with IPCO C-ZONE Herbicide will
	provide control of listed weeds up to 10 cm in height, or as specified.
	² The tank mix of IPCO Clomazone with IPCO C-ZONE Herbicide must include Agral 90 or AgSurf at 0.25% v/v (0.25L per 100L of spray solution) or Merge at 1% v/v (1L per 100L of spray solution)
IPCO Clomazone	PLUS IPCO C-ZONE HERBICIDE PLUS GLYPHOSATE TANK MIX
CROP	Canola
APPLICATION	IPCO Clomazone:
RATES AND	Rate: 0.25 - 0.33 L/ha
WEEDS	Weeds controlled:
CONTROLLED	Cleavers (suppression only at 0.25 L/ha)
	Weeds suppressed:
	 Common chickweed IPCO C-ZONE Herbicide^{1, 2}:
	Rate: 36.5 mL/ha
	Weeds controlled:
	Lambsquarters, common (up to 7.5 cm tall)
	,
	Nightshade, Eastern black (up to 5 cm tall) Discussed as desired.
	Pigweed, redroot
	Velvetleaf
	Waterhemp, tall (up to 5 cm tall)
	Rate: 58 mL/ha
	Weeds controlled: all weeds controlled at 36.5 mL/ha rate plus:
	• Flixweed,
	Lambsquarters, common
	Mallow, round-leaved
	Morning glory
	Nightshade, hairy
	Pennycress, field (stinkweed)
	Pigweed, prostrate
	Pigweed, smooth Dispused to workle
	Pigweed, tumble
	Purslane, common
	Smartweed, Pennsylvania (seedling)
	Mustard, tansy
	Waterhemp, tall
	Waterhemp, common
	Rate: 73 mL/ha
	Weeds controlled: all weeds controlled at 58 mL/ha rate plus:
	viccus controlled, all viceus controlled at 50 me/ha rate plus.

- Carpetweed
- Cleavers
- Cocklebur
- Jimsonweed
- Kochia
- Nightshade, Eastern black
- Thistle, Russian (up to 5 cm tall),
- Shepherd's purse
- Canola, volunteer, including glyphosate-tolerant

Rate: 117 mL/ha

Weeds controlled: all weeds controlled by the 73 mL/ha rate plus:

- Burclover
- Lettuce, prickly
- Mallow, Venice (up to 5 cm tall)
- Spurry, corn

Glyphosate:

Rate: 450 g ae/ha³ Weeds controlled:

- Barley, volunteer
- Foxtail, green
- Lady's thumb
- Mustard, wild
- Oats, wild
- Wheat, volunteer

Rate: 450 - 685 g ae/ha³

Weeds controlled: weeds controlled by the 450 g ae/ha rate plus:

- Brome, downy
- Buckwheat, wild⁴
- Darnel, Persian
- Flax, volunteer
- Fleabane, Canada (less than 8 cm in height)
- Foxtail, giant
- Hemp Nettle
- Narrow-leaved hawk's beard⁵
- Ragweed, common (less than 8 cm in height)

RESTRICTIONS DO Co	/eeds controlled: weeds controlled by the 450-685 g ae/ha rate plus: Bluegrass, annual Crab grass Narrow-leaved vetch Prickly lettuce Sowthiste, annual ate: 900 g ae/ha³ /eeds controlled: weeds controlled by the 810 g ae/ha rate plus: Dandelion (less than 15 cm) Quackgrass (light to moderate infestations, 3-4 green leaves or more) NOT make more than one application per season. pply prior to seeding canola. O NOT incorporate. O NOT apply to sandy soil. ontrol may be reduced in high organic matter soils.
RESTRICTIONS DO Co	pply prior to seeding canola. O NOT incorporate. O NOT apply to sandy soil.
en for	ontrol may be reduced in high organic matter soils.
NOTES NOTES NOTES In the Supig Suran as as as an as as an as an as an as an an an as an an as an an as an an as an	emporary whitening and/or yellowing of the crop may occur when merging from the treated soil. If environmental conditions are unfavorable or plant growth (e.g., cool weather, extreme moisture, compacted soil, our agronomic practices), the crop's ability to fully recover from this initial erbicide response may be negatively affected. usceptible weed species may emerge from the soil but are devoid of igmentation and plant death occurs in a short period of time. uppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Competition by weeds listed as suppressed that remain in a crop will vary depending upon factors such as crop competition, weed biotype, the number of weed seeds in the soil and the time of weed emergence relative to crop emergence. When used as directed, tank mixes with IPCO C-ZONE Herbicide will rovide control of listed weeds up to 10 cm in height, or as specified. An adjuvant is not required for this tank mix. Weeds up to 15 cm in height are controlled by these rates of glyphosate nless otherwise specified Wild buckwheat: use 450 g ae/ha of glyphosate if less than 3 leaves or 685 ae/ha if 3-4 leaf stage Varrow-leaved hawk's-beard: use 450 g ae/ha of glyphosate if less than cm in height or 685 g ae/ha if 8-15 cm

MOSTARD AND	CAMELINA (NATIONAL)
CROP	Mustard (oilseed and condiment) [brown, Oriental, yellow], Ethiopian mustard (Brassica carinata) and Camelina
GENERAL INFORMATION	IPCO Clomazone is to be used as part of an integrated approach for the early-season suppression of cleavers and chickweed as a soil-applied preplant application in mustard and camelina. Application of a post-

	emergence herbicide that is effective on cleavers and tolerated by the crop is recommended .
WEEDS SUPPRESSED	Broadleaf weeds: Cleavers (early season) Common chickweed
APPLICATION TIMING	Apply as a single, soil-applied application prior to seeding mustard and camelina and prior to weed emergence.
APPLICATION VOLUME	Apply in a minimum of 100 L of water per hectare.
APPLICATION RATES	Apply broadcast at a rate range of 0.25 L/ha.
RESTRICTIONS	DO NOT make more than one application per season. Apply prior to seeding mustard and camelina. DO NOT incorporate IPCO Clomazone. DO NOT apply to sandy soil. Control may be reduced in high organic matter soils. For use on Ethiopian mustard (Brassica carinata) grown for oilseed purposes only. Do not harvest Ethiopian mustard (Brassica carinata), also known as Abyssinian cabbage, for human consumption.
NOTES	Temporary whitening and/or yellowing of the crop may occur when emerging from the treated soil. If environmental conditions are unfavourable for plant growth (e.g., cool weather, extreme moisture, compacted soil, poor agronomic practices), the crop's ability to fully recover from this initial herbicide response may be negatively affected. Susceptible weed species may emerge from the soil but are devoid of pigmentation and plant death occurs in a short period of time. Suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Competition by weeds listed as suppressed that remain in a crop will vary depending upon factors such as crop competition, weed biotype, the number of weed seeds in the soil and the time of weed emergence relative to crop emergence.
TANK MIXTURES	S – MUSTARD (NATIONAL)
GENERAL INFORMATION	IPCO Clomazone may be tank mixed with the following herbicides to broaden the weed control spectrum. Do not incorporate tank mixtures of IPCO Clomazone and other products.
IPCO CLOMAZO	NE PLUS IPCO C-ZONE HERBICIDE TANK MIX
CROP	Mustard (oilseed) [brown, Oriental, yellow]
APPLICATION RATES AND WEEDS CONTROLLED/ SUPPRESSED	IPCO Clomazone: Rate: 0.25 L/ha Weeds suppressed:
	Rate: 36.5 mL/ha

Weeds controlled:

- Lambsquarters, common (up to 7.5 cm tall)
- Morning glory (up to 3 leaves)
- Nightshade, Eastern black (up to 5 cm tall)
- Pigweed, redroot
- Velvetleaf
- Waterhemp, tall (up to 5 cm tall)

Rate: 58 mL/ha

Weeds controlled: all weeds controlled at 36.5 mL/ha rate plus:

- Flixweed,
- Lambsquarters, common
- Mallow, round-leaved
- Morning glory
- Nightshade, hairy
- Pennycress, field (stinkweed)
- Pigweed, prostrate
- Pigweed, smooth
- Pigweed, tumble
- Purslane, common
- Smartweed, Pennsylvania (seedling)
- Mustard, tansy
- Waterhemp, tall
- Waterhemp, common

Rate: 73 mL/ha

Weeds controlled: all weeds controlled at 58 mL/ha rate plus:

- Carpetweed
- Cleavers
- Cocklebur
- Jimsonweed
- Kochia
- Nightshade, Eastern black
- Thistle, Russian (up to 5 cm tall),
- Shepherd's purse
- Canola, volunteer, including glyphosate-tolerant

Rate: 117 mL/ha

Weeds controlled: all weeds controlled by the 73 mL/ha rate plus:

- Burclover
- Lettuce, prickly
- Mallow, Venice (up to 5 cm tall)
- Spurry, corn

RESTRICTIONS	DO NOT make more than one application per season. Apply prior to seeding mustard. DO NOT incorporate. DO NOT apply to sandy soil.
	Control may be reduced in high organic matter soils.
	Temporary whitening and/or yellowing of the crop may occur when emerging from the treated soil. If environmental conditions are unfavourable for plant growth (e.g., cool weather, extreme moisture, compacted soil, poor agronomic practices), the crop's ability to fully recover from this initial herbicide response may be negatively affected. Susceptible weed species may emerge from the soil but are devoid of pigmentation and plant death occurs in a short period of time.
NOTES	Suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Competition by weeds listed as suppressed that remain in a crop will vary depending upon factors such as crop competition, weed biotype, the number of weed seeds in the soil and the time of weed emergence relative to crop emergence.
	¹ When used as directed, tank mixes with IPCO C-ZONE Herbicide will provide control of listed weeds up to 10 cm in height, or as specified. ² The tank mix of IPCO Clomazone with IPCO C-ZONE Herbicide must include Agral 90 or AgSurf at 0.25% v/v (0.25L per 100L of spray solution) or Merge at 1% v/v (1L per 100L of spray solution)
IPCO CLOMAZO	NE PLUS IPCO C-ZONE HERBICIDE PLUS GLYPHOSATE TANK MIX
CROP	Mustard (oilseed) [brown, Oriental, yellow]
APPLICATION RATES AND WEEDS	IPCO Clomazone: Rate: 0.25 L/ha Weeds suppressed:
CONTROLLED/ SUPPRESSED	CleaversCommon chickweed
	CleaversCommon chickweed
	 Cleavers Common chickweed IPCO C-ZONE Herbicide^{1,2}:
	CleaversCommon chickweed
	 Cleavers Common chickweed IPCO C-ZONE Herbicide^{1,2}: Rate: 36.5 mL/ha
	 Cleavers Common chickweed IPCO C-ZONE Herbicide^{1,2}: Rate: 36.5 mL/ha Weeds controlled:
	 Cleavers Common chickweed IPCO C-ZONE Herbicide^{1,2}: Rate: 36.5 mL/ha Weeds controlled: Lambsquarters, common (up to 7.5 cm tall)
	 Cleavers Common chickweed IPCO C-ZONE Herbicide ^{1,2} : Rate: 36.5 mL/ha Weeds controlled: Lambsquarters, common (up to 7.5 cm tall) Morning glory (up to 3 leaves) Nightshade, Eastern black (up to 5 cm tall) Pigweed, redroot
	 Cleavers Common chickweed IPCO C-ZONE Herbicide ^{1,2} : Rate: 36.5 mL/ha Weeds controlled: Lambsquarters, common (up to 7.5 cm tall) Morning glory (up to 3 leaves) Nightshade, Eastern black (up to 5 cm tall) Pigweed, redroot Velvetleaf
	 Cleavers Common chickweed IPCO C-ZONE Herbicide ^{1,2} : Rate: 36.5 mL/ha Weeds controlled: Lambsquarters, common (up to 7.5 cm tall) Morning glory (up to 3 leaves) Nightshade, Eastern black (up to 5 cm tall) Pigweed, redroot
	 Cleavers Common chickweed IPCO C-ZONE Herbicide ^{1,2} : Rate: 36.5 mL/ha Weeds controlled: Lambsquarters, common (up to 7.5 cm tall) Morning glory (up to 3 leaves) Nightshade, Eastern black (up to 5 cm tall) Pigweed, redroot Velvetleaf
	 Cleavers Common chickweed IPCO C-ZONE Herbicide ^{1,2} : Rate: 36.5 mL/ha Weeds controlled: Lambsquarters, common (up to 7.5 cm tall) Morning glory (up to 3 leaves) Nightshade, Eastern black (up to 5 cm tall) Pigweed, redroot Velvetleaf Waterhemp, tall (up to 5 cm tall)
	 Cleavers Common chickweed IPCO C-ZONE Herbicide ^{1,2} : Rate: 36.5 mL/ha Weeds controlled: Lambsquarters, common (up to 7.5 cm tall) Morning glory (up to 3 leaves) Nightshade, Eastern black (up to 5 cm tall) Pigweed, redroot Velvetleaf Waterhemp, tall (up to 5 cm tall) Rate: 58 mL/ha
	 Cleavers Common chickweed IPCO C-ZONE Herbicide ^{1,2} : Rate: 36.5 mL/ha Weeds controlled: Lambsquarters, common (up to 7.5 cm tall) Morning glory (up to 3 leaves) Nightshade, Eastern black (up to 5 cm tall) Pigweed, redroot Velvetleaf Waterhemp, tall (up to 5 cm tall) Rate: 58 mL/ha Weeds controlled: all weeds controlled at 36.5 mL/ha rate plus:

- Morning glory
- Nightshade, hairy
- Pennycress, field (stinkweed)
- Pigweed, prostrate
- Pigweed, smooth
- Pigweed, tumble
- Purslane, common
- Smartweed, Pennsylvania (seedling)
- Mustard, tansy
- Waterhemp, tall
- Waterhemp, common

Rate: 73 mL/ha

Weeds controlled: all weeds controlled at 58 mL/ha rate plus:

- Carpetweed
- Cleavers
- Cocklebur
- Jimsonweed
- Kochia
- Nightshade, Eastern black
- Thistle, Russian (up to 5 cm tall),
- Shepherd's purse
- Canola, volunteer, including glyphosate-tolerant

Rate: 117 mL/ha

Weeds controlled: all weeds controlled by the 73 mL/ha rate plus:

- Burclover
- Lettuce, prickly
- Mallow, Venice (up to 5 cm tall)
- Spurry, corn

Glyphosate:

Rate: 450 g ae/ha³ Weeds controlled:

- Barley, volunteer
- Foxtail, green
- Lady's thumb
- Mustard, wild
- Oats, wild
- · Wheat, volunteer

Rate: 450 - 685 g ae/ha³

Weeds controlled: weeds controlled by the 450 g ae/ha rate plus:

Brome, downy

	Buckwheat, wild ⁴
	Darnel, Persian
	Flax, volunteer
	Fleabane, Canada (less than 8 cm in height)
	Foxtail, giant
	Hemp Nettle
	Narrow-leaved hawk's beard ⁵
	Ragweed, common (less than 8 cm in height)
	Rate: 810 g ae/ha³
	Weeds controlled: weeds controlled by the 450-685 g ae/ha rate plus:
	Bluegrass, annual
	Crab grass
	Narrow-leaved vetch
	Prickly lettuce
	Sowthiste, annual
	Rate: 900 g ae/ha³
	Weeds controlled: weeds controlled by the 810 g ae/ha rate plus:
	Dandelion (less than 15 cm)
	 Quackgrass (light to moderate infestations, 3-4 green leaves or more)
	DO NOT make more than one application per season.
	Apply prior to seeding mustard.
RESTRICTIONS	DO NOT incorporate.
	DO NOT apply to sandy soil.
	Control may be reduced in high organic matter soils.
	Temporary whitening and/or yellowing of the crop may occur when emerging from the treated soil. If environmental conditions are unfavourable for plant growth (e.g., cool weather, extreme moisture, compacted soil, poor agronomic practices), the crop's ability to fully recover from this initial herbicide response may be negatively affected.
	Susceptible weed species may emerge from the soil but are devoid of pigmentation and plant death occurs in a short period of time.
NOTES	Suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Competition by weeds listed as suppressed that remain in a crop will vary depending upon factors such as crop competition, weed biotype, the number of weed seeds in the soil and the time of weed emergence relative to crop emergence.
	¹ When used as directed, tank mixes with IPCO C-ZONE Herbicide will provide control of listed weeds up to 10 cm in height, or as specified.
	² An adjuvant is not required for this tank mix.
	³ Weeds up to 15 cm in height are controlled by these rates of glyphosate unless otherwise specified
	⁴ Wild buckwheat: use 450 g ae/ha of glyphosate if less than 3 leaves or

685 g ae/ha if 3-4 leaf stage
⁵ Narrow-leaved hawk's-beard: use 450 g ae/ha of glyphosate if less than
8cm in height or 685 g ae/ha if 8-15 cm

PEPPERS (EASTERN CANADA AND MANITOBA ONLY)

CROP	Peppers
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	Broadleaf weeds:
WEEDS CONTROLLED	Velvetleaf Lambsquarters (including triazine –resistant biotypes) Lady's thumb (smartweed) Eastern black nightshade Grass weeds: Barnyardgrass Green foxtail Yellow foxtail (controlled at 2.35 L/ha when not tank-mixed)
WEEDS SUPPRESSED	Broadleaf weeds: Redroot pigweed Common ragweed
APPLICATION TIMING	Apply as a single, soil-applied, pre-emergent treatment before transplanting and prior to weed emergence. Place roots of the transplants below the chemical barrier when planting.
APPLICATION VOLUME	Apply in a minimum of 95 L of water per hectare
APPLICATION RATES	Apply broadcast at 1.55 to 2.35 L/ha. Use the lower recommended rate on light (coarse)¹ soils and the higher recommended rate on heavy (fine)³ soils according to the following: Light¹ soils: 1.55 L/ha Medium² soils: 1.95 L/ha Heavy³ soils: 2.35 L/ha
RESTRICTIONS	DO NOT use on banana peppers. DO NOT make more than one application per season. Apply before transplant and prior to weed emergence. DO NOT apply within 70 days of harvest for peppers. DO NOT incorporate IPCO Clomazone. DO NOT apply to sandy soil. Ground equipment only.
NOTES	Susceptible weed species may emerge from the soil but are devoid of pigmentation and plant death occurs in a short period of time. Suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Competition by weeds listed as suppressed that remain in a crop will vary depending upon factors such as crop competition, weed biotype, the number of weed seeds in the soil and the time of weed emergence relative to crop emergence. 1 Light (coarse) soils: sandy loam

	284 - 15 21 1 214 14 1
	² Medium soils: loam, silt loam, silt, sandy clay loam.
	³ Heavy (fine) soils: silty clay, clay loam, silty clay, clay
SOYBEANS (EAS	STERN CANADA ONLY)
CROP	Soybeans
WEEDS CONTROLLED	Broadleaf weeds: Velvetleaf Lambsquarters (including triazine –resistant biotypes) Lady's thumb (smartweed) Eastern black nightshade Grass weeds: Barnyardgrass Green foxtail Yellow foxtail (controlled at 2.35 L/ha when not tank-mixed)
WEEDS SUPPRESSED	Broadleaf weeds: Redroot pigweed Common ragweed
APPLICATION TIMING	Apply between seeding and when the soybeans emerge.
APPLICATION VOLUME	Apply in a minimum of 95 L of water per hectare
APPLICATION RATES	Apply broadcast at 1.55 to 2.35 L/ha. Use the lower recommended rate on light (coarse)¹ soils and the higher recommended rate on heavy (fine)³ soils according to the following: Light¹ soils: 1.55 L/ha Medium² soils: 1.95 L/ha Heavy³ soils: 2.35 L/ha
RESTRICTIONS	Natto soybean varieties have demonstrated injury from IPCO Clomazone and are not recommended for planting into soils treated with IPCO Clomazone. Check with the seed supplier for the tolerance of new varieties (particularly for specifically bred cultivars) to IPCO Clomazone. DO NOT incorporate IPCO Clomazone or IPCO Clomazone tank mixes.
REPLANTING INSTRUCTIONS	If initial seeding of soybeans fails to produce a stand, soybeans may be replanted in fields treated with IPCO Clomazone alone (or with recommended tank mixtures). DO NOT retreat field with a second application of IPCO Clomazone. When tank mixing with a labeled product refer to the soybean replant instructions for that product. DO NOT replant treated fields with any crop at intervals, which are inconsistent with the Rotational Crop Guidelines on this label.

NOTES	Susceptible weed species may emerge from the soil but are devoid of pigmentation and plant death occurs in a short period of time. Suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Competition by weeds listed as suppressed that remain in a crop will vary depending upon factors such as crop competition, weed biotype, the number of weed seeds in the soil and the time of weed emergence relative to crop emergence. ¹Light (coarse) soils: sandy loam ²Medium soils: loam, silt loam, silt, sandy clay loam. ³Heavy (fine) soils: silty clay, clay loam, silty clay, clay
TANK MIXTURES	S – SOYBEANS (EASTERN CANADA ONLY)
GENERAL INFORMATION	IPCO Clomazone may be tank mixed with the following herbicides to broaden the weed control spectrum. Do not incorporate tank mixtures of IPCO Clomazone and other products. Pre-emergence ONLY (conventional tillage, reduced tillage and no-till operations)
IPCO Clomazone	PLUS SENCOR 75 DF OR LEXONE DF TANK MIX
CROP	Soybeans
WEEDS CONTROLLED	Broadleaf weeds: Velvetleaf Lambsquarters (including triazine –resistant biotypes) Lady's thumb (smartweed) Eastern black nightshade Redroot pigweed Common ragweed Grass weeds: Barnyard grass Green foxtail Yellow foxtail

	IPCO Clomazone:
APPLICATION	Light¹ soils: 1.55 L/ha
	Medium ² soils: 1.95 L/ha
	Heavy ³ soils: 2.35 L/ha
RATES	
101120	Sencor 75DF or Lexone DF:
	Light¹ soils: 375 L/ha
	Medium ² and Heavy ³ soils: 530 L/ha
	DO NOT apply on light¹ soils containing less than 2% organic matter.
	DO NOT use when planting metribuzin sensitive soybean varieties.
RESTRICTIONS	Increased metribuzin activity (crop injury) is possible on high pH soils and/or
RESTRICTIONS	soils with atrazine residues.
	On variable soil with light sandy areas, some injury may occur on sandy
	areas if the rate used is for the heavier soil types in the field.
	¹ Light (coarse) soils: sandy loam
NOTES	² Medium soils: loam, silt loam, silt, sandy clay loam.
	³ Heavy (fine) soils: silty clay, clay loam, silty clay, clay
IPCO Clomazone	PLUS PURSUIT 240 TANK MIX
CROP	Soybeans
	Broadleaf weeds:
	Velvetleaf
	Lambsquarters (including triazine –resistant biotypes)
	 Lambsquarters (including triazine –resistant biotypes) Lady's thumb (smartweed)
	Lady's thumb (smartweed)
	Lady's thumb (smartweed)Eastern black nightshade
WEEDS	Lady's thumb (smartweed)Eastern black nightshadeRedroot pigweed
WEEDS CONTROLLED	 Lady's thumb (smartweed) Eastern black nightshade Redroot pigweed Common ragweed
	 Lady's thumb (smartweed) Eastern black nightshade Redroot pigweed Common ragweed Wild mustard
	 Lady's thumb (smartweed) Eastern black nightshade Redroot pigweed Common ragweed Wild mustard Grass weeds:
	 Lady's thumb (smartweed) Eastern black nightshade Redroot pigweed Common ragweed Wild mustard Grass weeds: Barnyardgrass
	 Lady's thumb (smartweed) Eastern black nightshade Redroot pigweed Common ragweed Wild mustard Grass weeds: Barnyardgrass Green foxtail
	 Lady's thumb (smartweed) Eastern black nightshade Redroot pigweed Common ragweed Wild mustard Grass weeds: Barnyardgrass Green foxtail Yellow foxtail
CONTROLLED	 Lady's thumb (smartweed) Eastern black nightshade Redroot pigweed Common ragweed Wild mustard Grass weeds: Barnyardgrass Green foxtail Yellow foxtail Old witchgrass
	 Lady's thumb (smartweed) Eastern black nightshade Redroot pigweed Common ragweed Wild mustard Grass weeds: Barnyardgrass Green foxtail Yellow foxtail

APPLICATION RATES	IPCO Clomazone: Light¹ soils: 1.55 L/ha Medium² soils: 1.95 L/ha Heavy³ soils: 2.35 L/ha Pursuit 240: All soils: 312 mL/ha
NOTES	Suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Competition by weeds listed as suppressed that remain in a crop will vary depending upon factors such as crop competition, weed biotype, the number of weed seeds in the soil and the time of weed emergence relative to crop emergence. 1 Light (coarse) soils: sandy loam 2 Medium soils: loam, silt loam, silt, sandy clay loam. 3 Heavy (fine) soils: silty clay, clay loam, silty clay, clay
IPCO Clomazone	PLUS DUAL II MAGNUM TANK MIX
CROP	Soybeans
WEEDS CONTROLLED	Broadleaf weeds: Velvetleaf Lambsquarters (including triazine –resistant biotypes) Lady's thumb (smartweed) Eastern black nightshade Redroot pigweed Barnyardgrass Grass weeds: Barnyardgrass Green foxtail Yellow foxtail Giant foxtail Old witchgrass
WEEDS SUPPRESSED	Broadleaf weeds: • Common ragweed
APPLICATION RATES	IPCO Clomazone: Light¹ soils: 1.55 L/ha Medium² soils: 1.95 L/ha Heavy³ soils: 2.35 L/ha Dual II Magnum: All soils: 1.75 L/ha
NOTES	Suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Competition by weeds listed as suppressed that remain in a crop will vary depending upon factors

	such as crop competition, weed biotype, the number of weed seeds in the
	soil and the time of weed emergence relative to crop emergence.
	¹ Light (coarse) soils: sandy loam
	² Medium soils: loam, silt loam, silt, sandy clay loam.
	³ Heavy (fine) soils: silty clay, clay loam, silty clay, clay
	APPLICATION FOLLOWED BY POSTEMERGENCE EASTERN CANADA ONLY)
GENERAL INFORMATION	Postemergence herbicides approved for use on soybeans may be applied following treatments of IPCO Clomazone alone or in tank mix combinations for control of emerged weeds as listed on the postemergence product labels.
CUCUMBERS (E.	ASTERN CANADA ONLY)
CROP	Cucumbers (field)
	Broadleaf weeds:
	Velvetleaf
WEEDS	Lambsquarters (including triazine –resistant biotypes)
SUPPRESSED	Grass weeds:
	Barnyardgrass
APPLICATION	Apply as a single, soil-applied, pre-emergent treatment after seeding and
TIMING	prior to crop and weed emergence.
APPLICATION VOLUME	Apply in 95 - 375 L of water per hectare
APPLICATION RATES	Apply broadcast at 0.78 – 1.17 L/ha. Use the lower recommended rate on light (coarse) ¹ soils and the higher recommended rate on heavy (fine) ³ soils
	DO NOT make more than one application per season.
	Apply after seeding but prior to cucumbers emergence.
RESTRICTIONS	DO NOT apply within 30 days of harvest for cucumbers.
	DO NOT incorporate IPCO Clomazone.
	DO NOT apply to sandy soil.
NOTES	Temporary whitening and/or yellowing of the crop may occur when emerging from the treated soil. If environmental conditions are unfavorable for plant growth (e.g., cool weather, extreme moisture, compacted soil, poor agronomic practices), the crop's ability to fully recover from this initial herbicide response may be negatively affected.
	Susceptible weed species may emerge from the soil but are devoid of
	pigmentation and plant death occurs in a short period of time.
	Suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Competition by weeds listed as suppressed that remain in a crop will vary depending upon factors such as crop competition, weed biotype, the number of weed seeds in the
	soil and the time of weed emergence relative to crop emergence.

	¹Light (coarse) soils: sandy loam
	² Medium soils: loam, silt loam, silt, sandy clay loam.
	³ Heavy (fine) soils: silty clay, clay loam, silty clay, clay
MELONS (EASTE	ERN CANADA ONLY)
CROP	Muskmelons, watermelons
	Broadleaf weeds:
WEEDS	Velvetleaf
SUPPRESSED	Lambsquarters (including triazine –resistant biotypes)
	Grass weeds:
	Barnyardgrass
APPLICATION TIMING	Apply as a single, soil-applied, pre-emergent treatment after seeding and prior to crop and weed emergence.
APPLICATION VOLUME	Apply in 95 - 375 L of water per hectare
APPLICATION RATES	Apply broadcast at 0.78 L/ha on all soil types
	DO NOT make more than one application per season.
	Apply after seeding but prior to melon emergence.
RESTRICTIONS	DO NOT apply within 60 days of harvest for melons.
	DO NOT incorporate IPCO Clomazone.
	DO NOT apply to sandy soil.
	IPCO Clomazone may cause unacceptable injury symptoms to muskmelon and watermelon that may lead to a yield loss. Consult your seed supplier or local crop production specialist for information on the tolerance of muskmelon and watermelon to IPCO Clomazone.
NOTES	Temporary whitening and/or yellowing of the crop may occur when emerging from the treated soil. If environmental conditions are unfavorable for plant growth (e.g., cool weather, extreme moisture, compacted soil, poor agronomic practices), the crop's ability to fully recover from this initial herbicide response may be negatively affected.
	Susceptible weed species may emerge from the soil but are devoid of pigmentation and plant death occurs in a short period of time.
	Suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Competition by weeds listed as suppressed that remain in a crop will vary depending upon factors such as crop competition, weed biotype, the number of weed seeds in the soil and the time of weed emergence relative to crop emergence.
SQUASH (INCLU	DING PROCESSING PUMPKIN VARIETIES; EASTERN CANADA ONLY)
CROP	Squash (including processing pumpkin varieties)
	Broadleaf weeds:
WEEDS	Velvetleaf
SUPPRESSED	Lambsquarters (including triazine –resistant biotypes).
	Grass weeds:

	Barnyardgrass
APPLICATION	Apply as a single, soil-applied, pre-emergent treatment after seeding and
TIMING	prior to crop or transplanting and prior to weed emergence.
APPLICATION VOLUME	Apply in 95 - 375 L of water per hectare
APPLICATION RATES	Apply broadcast at 0.78 – 1.17 L/ha. Use the lower recommended rate on light (coarse) ² soils and the higher recommended rate on fine (heavy) ³ soils
RESTRICTIONS	DO NOT make more than one application per season. Apply after seeding but prior to squash or pumpkin emergence. DO NOT apply within 30 days of harvest for squash or processing pumpkins. DO NOT incorporate IPCO Clomazone. DO NOT apply to sandy soil. DO NOT use on Jack-O-Lantern Pumpkins. DO NOT use on the following cultivars or varieties as unacceptable whitening of the fruit may occur: NK530, NK580, Turks Turban, Golden Delicious, all Banana types, and all other <i>Curcurbita maxima</i> types that have
	a pink or burnt orange coloration at harvest. Temporary whitening and/or yellowing of the crop may occur when emerging from the treated soil. If environmental conditions are unfavorable for plant growth (e.g., cool weather, extreme moisture, compacted soil, poor agronomic practices), the crop's ability to fully recover from this initial herbicide response may be negatively affected. Susceptible weed species may emerge from the soil but are devoid of
NOTES	pigmentation and plant death occurs in a short period of time. Suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Competition by weeds listed as suppressed that remain in a crop will vary depending upon factors such as crop competition, weed biotype, the number of weed seeds in the soil and the time of weed emergence relative to crop emergence.
	¹Light (coarse) soils: sandy loam
	² Medium soils: loam, silt loam, silt, sandy clay loam.
	³ Heavy (fine) soils: silty clay, clay loam, silty clay, clay
	ES (EASTERN CANADA ONLY)
CROP	Sweet potatoes
WEEDS CONTROLLED	Broadleaf weeds: Velvetleaf Lambsquarters (including triazine –resistant biotypes) Lady's thumb (smartweed) Eastern black nightshade Grass weeds: Barnyardgrass Green foxtail
WEEDS	Broadleaf weeds:
	<u> </u>

SUPPRESSED	Redroot pigweed
	Common ragweed
	Yellow foxtail
APPLICATION TIMING	Apply as a single, soil-applied application after transplanting and prior to weed emergence.
APPLICATION VOLUME	Apply in a minimum of 95 L of water per hectare
APPLICATION RATES	Apply broadcast at 1.55 L/ha to light (coarse)¹ soils
	DO NOT make more than one application per season.
RESTRICTIONS	Apply post transplant to sweet potatoes.
RESTRICTIONS	DO NOT apply within 95 days of harvest for sweet potatoes.
	DO NOT incorporate IPCO Clomazone.
	Susceptible weed species may emerge from the soil but are devoid of pigmentation and plant death occurs in a short period of time.
NOTES	Suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Competition by weeds listed as suppressed that remain in a crop will vary depending upon factors such as crop competition, weed biotype, the number of weed seeds in the soil and the time of weed emergence relative to crop emergence.
	¹ Light (coarse) soils: sandy loam

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than Interprovincial Cooperative Limited under the User Requested Minor Use Label Expansion program. For these uses, Interprovincial Cooperative Limited 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.

ASPARAGUS (N	ATIONAL)
CROP	Asparagus
GENERAL INFORMATION	IPCO Clomazone herbicide may be applied as a soil applied treatment prior to weed emergence for suppression or control of annual grass and broadleaf weeds in asparagus.
WEEDS CONTROLLED	Broadleaf weeds: Velvetleaf Lambsquarters (including triazine –resistant biotypes) Lady's thumb (smartweed) Eastern black nightshade Grass weeds: Barnyardgrass Green foxtail Yellow foxtail (controlled at 2.35 L/ha when not tank-mixed)
WEEDS SUPPRESSED	Broadleaf weeds: Redroot pigweed Common ragweed
APPLICATION TIMING	Apply as a broadcast application to the soil prior to spear emergence. If spears have emerged, make an application after a clean harvest. Cover exposed plants with soil prior to application.
APPLICATION VOLUME	Apply using a water volume of 95 - 375 L/ha.
APPLICATION RATES	Apply broadcast at 1.55 to 2.35 L/ha. Use the lower recommended rate on light (coarse) ³ soils and the higher recommended rate on heavy (fine) ⁵ soils according to the following: Light ¹ soils: 1.55 L/ha Medium ² soils: 1.95 L/ha Heavy ³ soils: 2.35 L/ha
RESTRICTIONS	DO NOT make more than one application per season. DO NOT apply within 14 days of harvest of asparagus.

	DO NOT incorporate IPCO Clomazone.
	Ground equipment only.
NOTES	Susceptible weed species may emerge from the soil but are devoid of pigmentation and plant death occurs in a short period of time. Suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Competition by weeds listed as suppressed that remain in a crop will vary depending upon factors such as crop competition, weed biotype, the number of weed seeds in the soil and the time of weed emergence relative to crop emergence. ¹Light (coarse) soils: sandy loam ²Medium soils: loam, silt loam, silt, sandy clay loam.
	³ Heavy (fine) soils: silty clay, clay loam, silty clay, clay
CILANTRO (NAT	
CROP	Cilantro
GENERAL INFORMATION	IPCO Clomazone herbicide may be utilized as a soil applied treatment prior to weed or crop emergence in cilantro.
WEEDS SUPPRESSED	Broadleaf weeds: Velvetleaf Lambsquarters (including triazine –resistant biotypes) Grass weeds: Barnyardgrass
APPLICATION TIMING	Apply broadcast after seeding but prior to crop or weed emergence.
APPLICATION VOLUME	Apply using a water volume of 95 - 375 L/ha.
APPLICATION RATES	Apply broadcast after seeding but prior to crop or weed emergence at a single rate of 0.78 L/ha.
RESTRICTIONS	Do not make more than one application per season. Apply after seeding but prior to emergence of crop or weeds. Do not apply within 50 days of harvest. Do not incorporate IPCO Clomazone Herbicide. Do not apply to sandy soil.
NOTES	Susceptible weed species may emerge from the soil but are devoid of pigmentation and plant death occurs in a short period of time. Temporary whitening and/or yellowing of the crop may occur when emerging from the treated soil. If environmental conditions are unfavorable for plant growth (e.g., cool weather, extreme moisture, compacted soil, poor agronomic practices), the crop's ability to fully recover from this initial herbicide response may be negatively affected. Not all varieties of cilantro have been screened for tolerance to IPCO Clomazone Herbicide and, therefore, first use of IPCO Clomazone Herbicide should be limited to a small area of each variety to confirm tolerance prior to adoption as a general field practice. Additionally, consult your seed supplier for information on tolerance of

specific varieties of cilantro to IPCO Clomazone Herbicide.

DRY BEANS (NATIONAL)	
CROP	Dry seed of <i>Phaseolus</i> spp. (includes black bean, cranberry bean, dry bean, field bean, French bean, garden bean, great northern bean, green bean, kidney bean, lima bean, navy bean, pink bean, pinto bean, red bean, scarlet runner bean, tepary bean and yellow bean); Dry seed broad bean (fava bean); Dry seed of <i>Lupinus</i> spp. (includes Andean lupin, blue lupin, grain lupin, sweet lupin, white lupin, white sweet lupin and yellow lupin).
GENERAL INFORMATION	IPCO Clomazone herbicide may be utilized as a soil applied treatment after seeding but prior to crop emergence.
WEEDS CONTROLLED	Broadleaf weeds:
	Cleavers (early season; suppression only at 0.25L/ha)
WEEDS SUPPRESSED	Broadleaf weeds: • Common chickweed
APPLICATION TIMING	Apply broadcast after seeding but prior to crop or weed emergence.
APPLICATION VOLUME	Apply using a minimum water volume of 95 L/ha.
APPLICATION RATES	Apply broadcast at a rate range of 0.25 - 0.33 L/ha.
	Application of 0.25 L/ha will suppress cleavers and can be used if cleaver populations are light.
RESTRICTIONS	Do not make more than one application per season.
	Apply after seeding but prior to emergence of crop or weeds.
	Do not incorporate IPCO Clomazone Herbicide.
	Do not apply to sandy soil.
	Control may be reduced in high organic matter soils.
NOTES	Susceptible weed species may emerge from the soil but are devoid of pigmentation and plant death occurs in a short period of time.
	Temporary whitening and/or yellowing of the crop may occur when emerging from the treated soil.
	Not all varieties of dry beans have been screened for tolerance to IPCO Clomazone Herbicide and, therefore, first use of IPCO Clomazone Herbicide should be limited to a small area of each variety to confirm tolerance prior to adoption as a general field practice.

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, IPCO Clomazone is a Group 13 herbicide. Any weed population may contain or develop plants naturally resistant to IPCO Clomazone and other Group 13 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same fields. 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:

- 1. Where possible, rotate the use of IPCO Clomazone or other Group 13 herbicides within a growing season (sequence) or among growing seasons with different herbicide groups that control the same weeds in a field.
- 2. 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.
- 3. 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.
- 4. Monitor treated 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 and planting clean seed.
- 5. Have suspected resistant weed seeds tested by a qualified laboratory to confirm resistance and identify alternative herbicide options.
- 6. Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for the specific crops and weed biotypes.
- 7. For further information or to report suspected resistance contact Interprovincial Cooperative Limited at 1-204-233-3461