

(Booklet)

Group	4	Herbicide
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IPCO®

CLOVITOX PLUS®

LIQUID HERBICIDE

CONTROLS MANY BROADLEAF WEEDS IN SEEDLING CLOVER, PEAS, PASTURE,
CEREALS, CORN AND SEEDLING GRASSES.

AGRICULTURAL

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

GUARANTEE: MCPB 375 g a.e./L,
MCPA 25 g a.e./L
(Both present as sodium salts)

REGISTRATION NO. 24336
PEST CONTROL PRODUCTS ACT

NET CONTENTS
10 litres

DANGER POISON

CORROSIVE TO EYES

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

®T.M. Reg'd./M.D.

RC 911- 1009

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DIRECTIONS FOR USE:

SECTION 1

Crop: **SEEDLING CLOVER**, (Alsike, Ladino, Red, White Dutch, Wild White) With or without a companion crop.

Note: Do not apply in hot weather (27°C or more) or under drought conditions.

Treatment Stage: Do not apply by air. Treat after primary or spade leaf to 4th true leaf stage. If a companion crop is seeded, make sure it is also at the correct stage of growth for safe treatment. See Barley, Oats, Rye and Wheat in Section 2.

Do not apply more than once per year.

GO TO SECTION 8

SECTION 2

Crop: **BARLEY, OATS, RYE, WHEAT**

Note: Do not apply in hot weather (27°C or more) or under drought conditions.

Treatment Stage: For ground or aerial application. Apply from 2 leaf to flag leaf stage.

Do not apply more than once per year.

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SECTION 3

Crop: **PASTURE**

Note: Do not apply in hot weather (27°C or more) or under drought conditions.

Treatment Stage: For ground or aerial application. Apply after grazing or cutting when weeds are at a susceptible stage and have sufficient leaf area to be contacted by spray.

Do not apply more than twice per season, with a minimum retreatment interval of 90 days.

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SECTION 4

Crop: **PEAS - PROCESSING OR FIELD TYPES**

Note: Do not apply in hot weather (27°C or more) or under drought conditions or when peas are under stress due to disease or other adverse field conditions.

Treatment Stage: Do not apply by air. Apply when peas have 3-6 expanded leaves. Do not apply after the 6 leaf stage as damage may occur.

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SECTION 5

Crop: **FIELD CORN**

Note: Do not apply in hot weather (27°C or more) or under drought conditions.

Treatment Stage: Do not apply by air. Apply when crop is 45 cm high but before the beginning of tasseling. Use drop nozzles to spray weeds and avoid spraying corn leaves.

Do not apply more than once per year.

For hand harvesting of field corn, re-entry is not permitted until 15 days after application. As such, a preharvest interval (PHI) of 15 days after application is required.

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SECTION 6

Crop: **SEEDLING GRASSES: Seedling smooth brome grass, meadow brome grass, creeping red fescue, reed canary grass, alai fescue, meadow fescue, Tall fescue, alai wild ryegrass, Russian wild ryegrass, Timothy, crested wheatgrass, intermediate wheatgrass, pubescent wheatgrass, tall wheatgrass, slender wheatgrass, streambank wheatgrass, northern wheatgrass, western wheatgrass, and green needlegrass.**

Treatment Stage: Do not apply by air. Apply at the 2-4 leaf stage of the seedling grasses when weeds and crop are actively growing.

Do not apply more than twice per season, with a minimum retreatment interval of 90 days.

GO TO SECTION 8

SECTION 7

Crop: **SEEDLING ALFALFA Grown for Seed Production (Western Canada Only)**

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

The **DIRECTIONS FOR USE** for this product on seedling alfalfa grown for seed production were developed by persons other than Interprovincial Cooperative Limited, and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion Program. Interprovincial Cooperative Limited itself makes no representation or warranty with respect to Performance (efficacy) and/or crop tolerance (phytotoxicity) in connection with the use described for seedling alfalfa grown for seed production.

Accordingly, the User assumes all liability arising, and agree to hold Interprovincial Cooperative Limited harmless from any claims based on efficacy and/or phytotoxicity in connection with the use described for seedling alfalfa grown for seed production.

Treatment Stage:

Do not apply by air. Apply at the 3 to 6 trifoliate leaf stage of seedling alfalfa when the Canada Thistle and other broadleaf weeds are at a susceptible stage and the crop is growing well.

Alfalfa vigour may be reduced in the year of treatment, however, the crop recovers and yield will not normally be affected.

Do not apply more than twice per season, with a minimum retreatment interval of 90 days.

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SECTION 8

WEEDS CONTROLLED/RATES OF APPLICATION

Apply when weeds are in the stage of growth indicated. Tolerance increases with age of crop and weeds.

A) WEEDS CONTROLLED

Annual Broadleaf Weeds:	Spray Stage:	Rate:
Wild Mustard, Ball Mustard, Worm Seed Mustard, Stinkweed, Lambs-quarter's	Spray in seedling stage.	2.75 L/ha
Redroot Pigweed, Ragweed, Shepherd's Purse, Volunteer Rapeseed (including Canola).	Spray in seedling stage.	4.25 L/ha

B) WEEDS SUPPRESSED

(i) Annual Broadleaf Weeds*:	Spray Stage:	Rate:
Wild Radish, Hempnettle, Annual Sow Thistle	Spray in seedling stage.	4.25 L/ha*

***NOTE:** Control of this group of Annual Broadleaf Weeds may not be complete when treated under stress conditions such as hot weather, drought or if treated at more advanced stages.

(ii) Perennial Weeds*:	Spray Stage:	Rate:
Bull Thistle	Spray at rosette to early bud stage.	4.25 L/ha
Canada Thistle	Spray from 15 cm to early bud stage.	4.25 L/ha
Curled Dock	Spray at rosette stage.	4.25 L/ha
Plantains	Spray at rosette stage.	4.25 L/ha
Perennial Sow Thistle**	Spray in rosette stage.	4.25 L/ha
Field Bindweed**	Spray in spring.	4.25 L/ha
Horsetail	Spray when 15 cm high.	4.25 L/ha
Creeping Buttercup, Tall Buttercup	Spray in spring during rapid growth.	4.25 L/ha

***NOTE:** Top growth control of Perennial Weeds only. Weeds will regrow by next growing season.

****NOTE:** Application will retard flowering and growth of perennial sow thistle and check top growth of field bindweed.

Caution: Do not exceed 3.5 litres per hectare of product on seedling grasses.

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SECTION 9

MIXING AND APPLICATION INSTRUCTIONS:

1. Fill spray tank 1/2 full with water. Start agitation.
2. Add the herbicide.
3. Complete filling spray tank with water.
4. Use 175-225L of water per ha for application by ground equipment.
5. **DO NOT USE LESS THAN 175 L OF WATER PER HA FOR GROUND APPLICATION.**
6. Do not exceed 275 kPa pressure for ground application

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) coarse classification. Boom height must be 60 cm or less above the crop or ground.

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) coarse 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.

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 and spot treatment.

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 tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.

Method of Application	Crop		Buffer Zones (metres) Required for the Protection of:				
			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*	Cereals, pastures, seedling grasses, seedling clover and alfalfa, field corn, peas		1	1	1	1	4
Aerial	Cereals	Fixed wing	1	0	1	0	60
		Rotary wing	1	0	1	0	50
	Pastures	Fixed wing	5	1	1	1	100
		Rotary wing	4	1	1	1	80

*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%.

Use Precautions for Aerial Application (to cereal crops, pastures):

1. Aerial applicators must wear long pants and a long-sleeved shirt.
2. Mixers/loaders must wear long pants, a long-sleeved shirt and chemical-resistant gloves during mixing, loading, clean-up and repair activities.
3. Aircraft must use a closed cab.
4. Mixer/loader and applicator must be different individuals.
5. Use special care in aerial application where damage from drift can be greater.
6. Avoid direct applications to any body of water. Do not contaminate water through spray drift or by cleaning of equipment or disposal of wastes.
7. A minimum volume of 30 L per hectare of spray solution should be used. Use boom pressure of 235 kPa or less. Avoid placing nozzles where spray will enter wing tip vortices.
8. Do not apply this product directly to, or otherwise permit it to come into direct contact with desirable crops or other desirable broadleaf plants or non-target species and do not permit spray mists to drift onto them.
9. Coarse sprays are less likely to drift. Use only nozzles or nozzle configuration, which minimize the production of fine spray drops. Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure. When spraying avoid combinations of pressures and nozzle type that will result in fine particles (mist) which are more likely to drift. A spray thickening agent or drift retardant may be used with this product to aid in reducing spray drift.
10. Do not use human flaggers.
11. Avoid spray drift: Apply only when there is little or no hazard from spray drift. Small quantities of the spray, which may not be visible, may seriously injure susceptible crops and damage sensitive non-target habitat. A method must be used to detect air movement, lapse conditions, or temperature inversions (stable air) such as the use of balloons or a continuous smoke column at or near the spray site or a smoke generator on the spray equipment. If the smoke develops into layers or indicates a potential for hazardous spray drift, do not spray. Do not spray in winds exceeding 8 km per hour.
12. Buffer zones: Appropriate buffer zones should be established between treatment areas and aquatic systems and treatment areas and significant wildlife habitat.

GO TO SECTION 10

SECTION 10**PRECAUTIONS**

1. **KEEP OUT OF REACH OF CHILDREN.** 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.
2. Wear a long-sleeved shirt, long pants, socks, shoes, goggles or face shield, suitable respirator and chemical-resistant gloves during mixing, loading, application and clean-up. Aerial applicators and applicators using a closed cab are not required to wear chemical-resistant gloves.
3. Corrosive to eyes. Harmful if swallowed or absorbed through skin. Do not get in eyes, on skin or clothing. **DO NOT INHALE VAPOUR OR MIST.** When handling, do not eat, drink or smoke. Take a shower daily, immediately after completing application. Wear freshly laundered clothes daily. Handle with care and mix only in a closed container. Use only in a well ventilated area.
4. Avoid spray or vapour drift onto susceptible plants such as tomatoes, tobacco, sugar beets, sunflowers, beans, turnips, cauliflower, cabbage, alfalfa, potatoes, ornamental trees, shrubs or flowers, canola, flax, or other desirable vegetation.
5. Do not spray when there is any danger of wind or on exceptionally hot days over 27°C.
6. Drift from spray may be reduced by using high volume sprays under low pressure and coarse sprays.
7. Do not contaminate any body of water. Avoid contamination of foods.
8. Do not use in a greenhouse.
9. Keep in original container during storage.
10. Do not store near seeds, feeds, fertilizers, plants, foodstuffs, or pesticides used on crops sensitive to this product.
11. Clean spray equipment thoroughly after use and rinse with clean water. Do not use spray equipment to apply other pesticides to crops sensitive to this product. Do not re-use empty containers.
12. Do not enter treated areas within 12-hours after application.
13. If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web-site at www.croplife.ca.

ENVIRONMENTAL HAZARDS:

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

Surface runoff

To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to, heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. soils that are compacted, fine-textured, or low in organic matter such as clay).

Avoid applying this product when heavy rain is forecast.

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

Leaching

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

RESISTANCE MANAGEMENT RECOMMENDATIONS:

For resistance management, IPCO Clovitox Plus Liquid Herbicide is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to IPCO Clovitox Plus Liquid Herbicide and other Group 4 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 Clovitox Plus Liquid Herbicide or other Group 4 herbicides with different herbicide groups that control the same weeds in a field. Use tank mixtures with herbicides from a different group when such use is permitted. Herbicide use should be based on an IPM program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical), cultural, biological and other chemical control practices. Monitor treated weed populations for resistance development. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed. Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes. For further information or to report suspected resistance, contact Interprovincial Cooperative Ltd. at 1-204-233-3461.

PRE-HARVEST INTERVALS:

Seedling forage grasses: Do not graze the treated crop or cut for hay in the year of establishment.

All other crops: Do not permit lactating dairy animals to graze fields within 7 days after application. Do not harvest for forage or cut hay within 7 days after application. Withdraw meat animals from treated fields at least 3 days before slaughter.

GO TO SECTION 11

SECTION 11

FIRST AID:

1. 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.
2. 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.
3. If swallowed, call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.
4. 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.
5. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

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SECTION 12

TOXICOLOGICAL INFORMATION:

High concentrations of MCPA may cause severe irritation to the eyes. Symptoms of overexposure to MCPA could include slurred speech, twitching, jerking and spasms, drooling, low blood pressure and unconsciousness. No specific antidote. Treat symptomatically. Symptomatic measures after ingestion include gastric lavage. Eye, skin and mucous membranes irritated due to alkaline nature of product.

GO TO SECTION 13

SECTION 13

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

NOTICE TO USER:

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

(Base Label)

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LIQUID HERBICIDE

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CEREALS, CORN AND SEEDLING GRASSES.

AGRICULTURAL

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KEEP OUT OF REACH OF CHILDREN**

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MCPA 25 g a.e./L
(Both present as sodium salts)

**REGISTRATION NO. 24336
PEST CONTROL PRODUCTS ACT**

NET CONTENTS
10 litres

DANGER POISON

CORROSIVE TO EYES

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

®T.M. Reg'd./M.D.

RC911- 1009

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5. Do not spray when there is any danger of wind or on exceptionally hot days over 27°C.
6. Drift from spray may be reduced by using high volume sprays under low pressure and coarse sprays.
7. Do not contaminate any body of water. Avoid contamination of foods.
8. Do not use in a greenhouse.
9. Keep in original container during storage.
10. Do not store near seeds, feeds, fertilizers, plants, foodstuffs, or pesticides used on crops sensitive to this product.
11. Clean spray equipment thoroughly after use and rinse with clean water. Do not use spray equipment to apply other pesticides to crops sensitive to this product. Do not re-use empty containers.
12. Do not enter treated areas within 12-hours after application.
13. Do not permit lactating dairy animals to graze fields within 7 days after application.
14. Do not harvest for forage or cut hay within 7 days after application.
15. Withdraw meat animals from treated fields at least 3 days before slaughter.
16. If this pest control is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web-site at www.croplife.ca.

ENVIRONMENTAL HAZARDS: Refer to the booklet for complete environmental hazards.

FIRST AID:

1. 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.
2. 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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4. 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.
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