

2015-02-10  
2014-4201  
BASE

GROUP **4** HERBICIDE

TOPSIDE

HERBICIDE

COMMERCIAL SOLUTION



WARNING  
EYE IRRITANT

POISON

For use in seedling clovers, seedling grasses, cereals, peas, corn and pastures.

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

GUARANTEE:

MCPB (Present as Sodium Salt) 375 g a. e. /L

MCPA (Present as Sodium Salt) 25 g a. e. /L

Warning: contains the allergen, Milk

REGISTRATION NO. 22003

PEST CONTROL PRODUCTS ACT

LOVELAND PRODUCTS CANADA INC.

789 Donnybrook Drive

Dorchester, Ontario

N0L 1G5

1-800-328-4678

NET CONTENTS: 10 L

01/13

FRONT

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## **PRECAUTIONS**

KEEP OUT OF REACH OF CHILDREN.

Harmful or fatal if swallowed

Harmful if inhaled. Avoid inhaling/ breathing dusts, sprays, or other aerosolized particles.

Causes eye irritation, DO NOT get into eyes.

Protect from frost. Do not allow to freeze. Shake well before using. Store with container tightly closed and away from seeds, fertilizers, plants, foodstuffs and greenhouses. Avoid spray drift on to susceptible crops such as shrubs, trees, or flowers. Do not spray during periods of high winds. Avoid contamination of ponds, streams, rivers and water sources. Wash sprayer thoroughly before and after use.

Apply only when the potential for drift to areas of human habitation or areas of human activity (houses, cottages, schools and recreational areas) is minimal.

Take into consideration wind speed, wind direction, temperature inversion, application equipment and sprayer settings.

Do not use in residential areas. Residential areas are defined as sites where bystanders including children may be potentially exposed during or after spraying. This includes around homes, schools, parks, playgrounds, playing fields, public buildings or any other areas where the general public including children could be exposed.

Not for use in greenhouses.

### **PERSONAL PROTECTIVE EQUIPMENT AND RESTRICTED-ENTRY INTERVALS RELATING TO OCCUPATIONAL EXPOSURE**

Mixers, loaders and applicators must wear a long-sleeved shirt, long pants, socks, shoes and chemical-resistant gloves. Applicators using a closed cab are not required to wear chemical-resistant gloves. After use wash hands and skin contaminated by spray.

Re-entry is not permitted until 12 hours after application for all agricultural scenarios. For hand harvesting of corn (field), re-entry is not permitted until 15 days after application. As such, a preharvest interval (PHI) of 15 days after application is required.

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.

## **Groundboom**

Mixers/Loaders/Applicators. There are two tiers for the groundboom scenario:

If handling less than 62 kg of active ingredient in one day, wear a long-sleeved shirt, long pants, shoes plus socks, and chemical resistant gloves. Chemical resistant gloves are not required to be worn during groundboom application but are required for clean-up and repair. According to these provisions, do not handle more than 62 kg of active ingredient in one day (e.g. 39 ha at the maximum rate of 1.594 kg a.i./ha). These restrictions are in place to minimize exposure to individual workers. Application may need to be performed over multiple days or using multiple workers.

If handling more than 62 kg active ingredient in one day, use a closed-system for mixing/loading while wearing coveralls over a long-sleeved shirt, long pants, shoes plus socks, and chemical resistant gloves. Also, use a closed-cab that provides both a physical barrier and respiratory protection (i.e. dust/mist filtering and/or vapour/gas purification system). The closed cab must have a chemical resistant barrier that totally surrounds the occupant and prevents contact with pesticides outside the cab. Chemical resistant gloves are not required to be worn inside the closed cab, but have them ready for leaving the cab during calibration, repair or cleaning of equipment. According to these provisions, do not handle more than 270 kg of active ingredient in one day (e.g. 170 ha at the maximum rate of 1.594 kg a.i./ha). These restrictions are in place to minimize exposure to individual workers. Application may need to be performed over multiple days or using multiple workers.

62 kg a. i./day/person is equivalent to 165 L of product/day/person at maximum rate.  
270 kg a.i./day/person is equivalent to 720 L of product/day/person at maximum rate.

## **Spot treatment**

Mixers/Loaders/ Applicators. Using manually-pressurized handheld equipment:

Wear coveralls over a long-sleeved shirt, long pants, shoes plus socks, and chemical resistant gloves. Do not handle more than 1.4 kg of active ingredient in one day (e.g. 0.9 ha at the maximum rate of 1.594 kg a.i./ha). These restrictions are in place to minimize exposure to individual workers. Application may need to be performed over multiple days or using multiple workers.

1.4 kg a. i./day/person is equivalent to 4 L of product/day/person at maximum rate.

**Restricted Entry Intervals (REI):**

Cereals, pastures, seedling clover, seedling grasses, peas (succulent/processing and dry/field):

An REI of 12 hours after application is required to perform post-application activities in treated areas.

Field com:

An REI of 9 days after application is required to perform post-application activities (scouting) in treated areas.

**STATEMENTS REDUCING DIETARY EXPOSURE**

- When used on barley, oats, rye, wheat, field com, peas (succulent/processing and dry/field), pastures and seedling grasses:

*Do not permit lactating dairy animals to graze fields within 7 days after application.*

*Do not harvest forage or cut hay within 7 days after application.*

*Withdraw meat animals from treated fields at least 3 days before slaughter.*

- When used on seedling clover:

*Do not permit lactating dairy animals to graze fields within 30 days after application.*

*Do not harvest forage or cut hay within 30 days after application.*

*Withdraw meat animals from treated fields at least 3 days before slaughter.*

A minimum rotational crop plant back interval (PBI) of 12 months must be observed for all crops other than those registered for use with MCP A or MCPB.

DO NOT APPLY BY AIR.

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

**ENVIRONMENTAL HAZARDS:**

Toxic to aquatic organisms, birds and small wild mammals.

TOXIC to 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.

### **FIRST AID**

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

**IF 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, preferable by mouth-to-mouth, if possible. Call a poison control centre or doctor for treatment advice.

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

### **TOXICOLOGICAL INFORMATION:**

High concentrations of MCPA/ MCPB may cause severe irritation to the eyes. Symptoms of overexposure to MCPA/ MCPB could include slurred speech, twitching, jerking and spasms, drooling, low blood pressure and unconsciousness. Treat symptomatically.

## DISPOSAL

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
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**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on this 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.

SPECIMEN

DATAPAK

GROUP

4

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PEST CONTROL PRODUCTS ACT

IN CASE OF EMERGENCY DUE TO A MAJOR SPILL, FIRE OR POISONING  
INVOLVING THIS PRODUCT CALL DAY OR NIGHT, 1-800-561-8273

LOVELAND PRODUCTS CANADA INC.  
789 Donnybrook Drive  
Dorchester, Ontario  
N0L 1G5  
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## RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management TOPSIDE Herbicide is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to TOPSIDE 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 TOPSIDE Herbicide or other Group 4 herbicides within a growing season (sequence) or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group when such use is permitted. To delay resistance, the less resistance-prone partner should control the target weed(s) as effectively as the more resistance-prone partner.
- Herbicide use should be based on an integrated weed management program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical control methods), cultural (for example, higher crop seeding rates; precision fertilizer application method and timing to favour the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Monitor weed populations after herbicide application for signs of resistance development (for example, only one weed species on the herbicide label not controlled). If resistance is suspected, prevent weed seed production in the affected area if possible by an alternative herbicide from a different group. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- Have suspected resistant weed seeds tested by a qualified laboratory to confirm resistance and identify alternative herbicide options.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Technical Service at 1-800-328-4678 or at [www.uap.ca](http://www.uap.ca).

## DIRECTIONS FOR USE

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

**WEATHER:** Apply TOPSIDE Herbicide in warm weather when plants are growing well. DO NOT apply in drought conditions.

**MIXING:** To ensure even mixing half fill the sprayer tank with clean water, add the required amount of TOPSIDE Herbicide and stir thoroughly. Add the remainder of the water and mix before spraying.

### BUFFER ZONES

Use of the following spray methods or equipment DO NOT require a buffer zone: handheld 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.

Method of Application	Crop	Buffer Zones (metres) Required for the Protection of:		
		Aquatic Habitat of Depths:		Terrestrial Habitat
		Less than 1m	Greater than 1m	
Field sprayer*	Cereals, seedling clovers, seedling grasses, peas, field corn and pastures	1	0	3*

- \* 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 labeled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy, the labeled buffer zone can be reduced by 30%.

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

**TIMES AND RATES OF APPLICATION:** Use the dose required to control the weeds present. DO NOT exceed 4.25 L/ha. A maximum of one application is allowed per season when applying products containing MCPB. A spray volume of 150 – 200 L/ha is recommended. Spray when the crop and weeds are growing well and the weeds are at a susceptible stage.

**SPRAY VOLUME:** Equip the spraying machine with nozzle tips to apply 150 – 200 liters of water per hectare using a pressure not exceeding 275 kPa. Before use, calibrate the machine to ensure that the correct application rate is obtained.

## **APPLICATION TIME**

### **CROP**

**CEREALS:** Wheat, oats, barley, rye. From two leaf stage to early flag leaf stage.

**SEEDLING CLOVER:** Wild White, Dutch White, Ladino, Alsike and Red Clovers. With or without a companion crop: After primary or spade leaf stage to fourth true leaf stage. Companion crop: Wheat, oats, barley, see above.

**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; TOPSIDE Herbicide may be applied at the 2-4 leaf stage of the crop using an application rate of 2.75 L – 3.5 L/ha to control annual and perennial broadleaf weeds. DO NOT graze the treated crop or cut for hay in the year of establishment.

**PASTURE:** (Established) After grazing or cutting when weeds are at a susceptible stage.

**FIELD CORN:** After the crop is 30-60 cm high, but before the beginning of tasseling. Drop nozzles should be used.

**PEAS:** Apply TOPSIDE Herbicide when the peas have three to six expanded leaves.

**IMPORTANT:** Damage may be caused, particularly in early maturing varieties, if spraying is carried out after this stage. Spray TOPSIDE Herbicide when the growing conditions are good and the peas are not under stress due to drought or disease.

**DO NOT** use TOPSIDE on crops other than those recommended above.

## SUSCEPTIBILITY OF WEEDS TO TOPSIDE

**ANNUALS:** Spray when the weeds are in the seedling stage. Resistance increases with age.

**SUSCEPTIBLE WEEDS:** Use 2.75 L/ha. Wild Mustard, Ball Mustard, Wormseed mustard, Stinkweed, Lamb's-quarters.

**MODERATELY SUSCEPTIBLE WEEDS:** Use 4.25 L/ha. Red-root Pigweed, Ragweed, Shepherd's Purse, Wild Radish, Hemp-nettle, Annual Sow-thistle.

**PERENNIALS:** Spray in good growing conditions at stage indicated below.

**MODERATELY SUSCEPTIBLE WEEDS:** Use 4.25 L/ha.

Bull Thistle – rosette to early bud stage.

Curled Dock – Young plants in rosette stage.

Plantain – Young plants in rosette stage.

**TOP GROWTH CONTROLLED:** Use 4.25 L/ha.

Canada Thistle – From 15 cm to early bud stage for top growth control.

Creeping Buttercup – In Spring when growth is vigorous.

Field Bindweed – In Spring to check top growth.

Horsetail – when 15 cm high.

Perennial Sowthistle – Rosette Stage: Growth and flowering retarded.

Tall Buttercup – In Spring when growth is vigorous.

**TIMES AND RATES OF APPLICATION:** Use the dose required to control the weeds present. DO NOT exceed 4.25 L/ha. A spray volume of 150 – 200 L/ha is recommended. Spray when the crop and weeds are growing well and the weeds are at a susceptible stage.

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