(Booklet)

Group 4 Herbicide

MCPA AMINE 600 Herbicide

LIQUID

COMMERCIAL READ THE LABEL BEFORE USING

ACTIVE INGREDIENT: MCPA 600 g a.e./L (Present as dimethylamine salt)

REGISTRATION NO: 31432 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 10 litres



Loveland Products Canada Inc. 789 Donnybrook Drive Dorchester, Ontario NOL 1G51-800-328-4678

®T.M. Reg'd. RC 541-0215

LABEL INDEX MCPA Amine 600 Herbicide

Wheat, Barley, Rye, Oats	GO TO SECTION 1	FORAGE LEGUMES (ALFALFA AND BIRDSFOOT TREFOIL) (direct and underseeded)	GO TO SECTION 10
Flax (Excluding Low Linoleic Acid Varieties)	GO TO SECTION 2	ESTABLISHED LEGUMES (ALFALFA; except early maturing varieties, CLOVER (ALSIKE and RED)	GO TO SECTION 11
Winter Wheat, Fall Rye	GO TO SECTION 3	NON- CROPLAND/INDUSTRIAL SITES (e.g. for use on rights-of-way for transportation, rights-of-way for utility lines, and in airports, wastelands, industrial parks, etc.	GO TO SECTION 12
Grass Pastures (Established)	GO TO SECTION 4	FOR SPRUCE SEEDLINGS FOR REFORESTATION	GO TO SECTION 13
Turf (Including Fairways and Lawns)	GO TO SECTION 5	Tank Mixes	GO TO SECTION 14
Corn (Field and Sweet)	GO TO SECTION 6	Mixing & Application Instructions	GO TO SECTION 15
Peas (Field & Canning) Except Nova Scotia	GO TO SECTION 7	Precautions	GO TO SECTION 16
ASPARAGUS	GO TO SECTION 8	First Aid	GO TO SECTION 17
SMALL GRAINS UNDERSEEDED WITH A LEGUME	GO TO SECTION 9	Toxicological Information	GO TO SECTION 18
		Rinsing and Disposal	GO TO SECTION 19

DIRECTIONS FOR USE:

SECTION 1

Crop: WHEAT, BARLEY, RYE, OATS

Treatment Stage:

Wheat, Barley, Spring Rye: Ground or air application. Treat from 4th leaf stage to just before

the flag leaf (shot blade) stage.

Oats: Ground or air application. Oats may be treated from emergence.

Use lowest rate on oats treated in the 3-6 leaf stage.

NOTE: Do not treat cereals underseeded to legumes.

Susceptible Weeds: Burdock, Cocklebur, Mustards (except Dog Mustard), Ragweed,

Flixweed*, Kochia, Lamb's-quarters, Russian Pigweed,

Shepherd's Purse, Stinkweed.

*Flixweed susceptible only at seedling stage. Use rates for harder to kill weeds to kill Fall germinated flixweed in the

Spring.

Rates to Use on Susceptible Weeds:

Small seedlings, good growing conditions: 583 mL/ha
Weeds in bud, dry or cool conditions, heavy infestation: 917 mL/ha

Harder to Kill Weeds: Annual Sow Thistle*, Bluebur, Blue Lettuce*, Canada Thistle*,

Peppergrass, Curled Dock, DogMustard, Goosefoot, Hempnettle

(Suppression Only), Redroot Pigweed, Russian Thistle*,

Perennial Sow Thistle*, Leafy Spurge*.

*Top growth control only.

Rates to use on Harder to Kill Weeds:

Small seedlings, good growing conditions:

1.04 L/ha
Weeds in bud, dry or cool conditions, heavy infestations:

1.46 L/ha

NOTE: Rates above 917 mL/ha may cause crop injury.

Do not apply more than once per year.

GO TO SECTION 15

SECTION 2

Crop: FLAX (LINSEED) (Excluding low-linolenic acid varieties)

Treatment Stage: Ground or air application. Treat after plants reach 5 cm in height

and before budding.

Susceptible Weeds: Burdock, Cocklebur, Mustards (except Dog Mustard), Ragweed,

Flixweed*, Kochia, Lamb's-quarters, Russian Pigweed,

Shepherd's Purse, Stinkweed.

*Flixweed susceptible only at seedling stage. Use rates for harder to kill weeds to kill fall germinated flixweed in the spring.

Rates to Use on Susceptible Weeds:

Small seedlings, good growing conditions:

Weeds in bud, adverse weather, heavy infestation:

583 mL/ha
917 mL/ha

NOTE: Rates above 708 mL/ha may cause injury.

GO TO SECTION 15

SECTION 3

Crop: WINTER WHEAT, FALL RYE

Treatment Stage: Ground or air application. Treat in Spring from time crop

commences growth to flag leaf stage.

NOTE: 1. Do not treat crops underseeded to legumes.

2. Doses above 417 mL/ha applied between the 3rd and

6th leaf **may** cause injury.

Susceptible Weeds: Burdock, Cocklebur, Mustards (except Dog Mustard), Ragweed,

Flixweed*, Kochia, Lamb's-quarters, Russian Pigweed,

Shepherd's Purse, Stinkweed.

*Flixweed susceptible only at seedling stage. Use rates for

harder to kill weeds to kill fall germinated flixweed in the spring.

Rates to Use on Susceptible Weeds:

Susceptible weeds, good growing conditions: 458 mL/ha Weeds in bud, adverse conditions, heavy infestations: 917 mL/ha

Do not apply more than once per year.

GO TO SECTION 15

SECTION 4

Crop: GRASS PASTURES (Established)

Treatment Stage: Ground or air application. Treat in Spring or Fall (good growing

conditions) for best results.

Susceptible Weeds: Bluebur, Cocklebur, Plaintain, Creeping Buttercup, Flixweed,

Kochia, Horsetail, Lamb's-quarters, Mustards, Prickly Lettuce, Ragweed, Russian Pigweed, Shepherd's Purse, Stinkweed, Wild

Radish.

Rates to Use on Susceptible Weeds:

1.67 L/ha

Harder to Kill Weeds: Blue Lettuce*, Canada Thistle*, Curled Dock, Dandelions, Dog

Mustard, Goatsbeard, Goosefoot, Hempnettle (Suppression), Leafy Spurge, Peppergrass, Redroot Pigweed, Sow Thistle*,

Tumbleweed. *Top Kill Only.

Rates to use on Harder to Kill Weeds:

2.92 L/ha

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

Crop: TURF (INCLUDING FAIRWAYS AND LAWNS)

Treatment Stage: Lawns: DO NOT APPLY BY AIR. Do not apply more than two

broadcast applications

per season. This does not include spot treatments. Apply when

weeds are young and growing fast for best results.

Susceptible Weeds: MCPA Amine 600 Alone[†]

Cocklebur, Common Plaintain, Creeping Buttercup, Flixweed, Kochia, Field Horsetail, Lamb's-quarters, Mustards, Prickly Lettuce, Ragweed, Russian Pigweed, Shepherd's Purse,

Stinkweed, Wild Radish. Dandelions

Harder to Kill Weeds: Blue Lettuce*, Canada Thistle*, Curled Dock, , Dog Mustard,

Goatsbeard*, Goosefoot, Hempnettle*, Leafy Spurge*, Peppergrass, Redroot Pigweed, Perennial Sow Thistle*,

Tumbleweed*. Bluebur

[†]See tank mixtures in Section 14 for additional weed control

options in turf
*Top Kill Only

Rates to Use (in 300 L of water/ha):

Small seedlings, good growing conditions: Larger weeds, adverse conditions, heavy infestation: 833 mL/ha 2.08 L/ha

For smaller areas, 20.83 mL in 10 L of water treats 100 m²

Crop: CORN (Field and Sweet)

Treatment Stage: Ground Application ONLY. Treat before corn is 15 cm high.

Susceptible Weeds: Controls Atrazine resistant and other susceptible broadleaf

weeds. (See Section 1 for list of weeds.)

Rates to Use:

Small seedlings, good growing conditions:

Larger weeds, adverse conditions, heavy infestation:

1.04 L/ha

Do not apply more than once per year.

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

GO TO SECTION 15

SECTION 7

Crop: PEAS, FIELD AND CANNING (Except Nova Scotia). Do not

combine with Malathion.

Treatment Stage: Spray when vine length is 10-20 cm. **DO NOT APPLY BY**

AIR.

Susceptible Weeds: Mustards (except Dog Mustard), Ragweed, Flixweed, Kochia,

Lamb's-quarters, Russian Pigweed, Shepherd's Purse,

Stinkweed.

Rates to Use:

Small seedlings, good growing conditions:

275 mL/ha
Larger weeds, adverse conditions, heavy infestations:

458 mL/ha

Crop: ASPARAGUS

Treatment Stage: Treat asparagus with MCPA AMINE 600 Herbicide following a

cultivation, just before first spears appear. Treatment may be

repeated at end of cutting season.

Susceptible Weeds: Burdock, Cocklebur, Mustards (except Dog Mustard), Ragweed,

Flixweed*, Kochia, Lamb's-quarters, Russian Pigweed,

Shepherd's Purse, Stinkweed.

*Flixweed susceptible only at seedling stage.

Rates to Use: Use 3.13 L/ha.

For asparagus, a maximum of 2 applications is permitted per season with a minimum retreatment interval of 21 days.

SECTION 9

Crop: SMALL GRAINS UNDERSEEDED WITH A LEGUME

Treatment Stage: MCPA AMINE 600 Herbicide may be used on grain interplanted

with alfalfa, (except early maturing varieties), red clover, ladino clover and alsike. Do not use on grain interplanted with sweet

clover or birdsfoot trefoil.

Susceptible Weeds: Burdock, Cocklebur, Mustards (except Dog Mustard), Ragweed,

Flixweed*, Kochia, Lamb's-quarters, Russian Pigweed,

Shepherd's Purse, Stinkweed.

*Flixweed susceptible only at seedling stage.

Rates to Use: Spray with not more than 0.292 - 0.583 L/ha when legumes are

at about the second true leaf stage.

SECTION 10

Crop: FORAGE LEGUMES (ALFALFA AND BIRDSFOOT

TREFOIL) (direct and underseeded)

Treatment Stage: For established legumes,

Susceptible Weeds: Bluebur, Cocklebur, Plantain, Creeping Buttercup, Flixweed*,

Kochia, Horsetail, Lamb's-quarters, Mustards, Prickly Lettuce, Ragweed, Russian Pigweed, Shepherd's Purse, Stinkweed, Wild

Radish.

*Flixweed susceptible only at seedling stage.

Rates to Use: The use of MCPA AMINE 600 Herbicide at 58.3 mL/ha (0.058)

L/ha) and CALIBER 625 (1.25 L/ha) provides better control of wild mustard plants beyond the four-leaf stage of the mustards.

This tank mix may increase crop stunting.

For established legumes, a maximum of 2 applications is permitted per season, with a minimum retreatment interval of 90 days.

SECTION 11

Crop: ESTABLISHED LEGUMES (ALFALFA; except early

maturing varieties, CLOVER (ALSIKE and RED)):

Treatment Stage: For established legumes,

Susceptible Weeds: Bluebur, Cocklebur, Plantain, Creeping Buttercup, Flixweed*,

Kochia, Horsetail, Lamb's-quarters, Mustards, Prickly Lettuce, Ragweed, Russian Pigweed, Shepherd's Purse, Stinkweed, Wild

Radish.

*Flixweed susceptible only at seedling stage.

Rates to Use: Application should be made at 0.833 – 1.25 L L/ha in the late fall

after the legume tops have been killed by frost. Legumes may be injured at higher rates. Do not used on sweet clover. Spring applications should be made at 0.833 L/ha before legumes and

grasses start active growth. Treat at an early stage of

development of the legumes and when they are covered by a

canopy of winter weeds

For established legumes, a maximum of 2 applications is permitted per season, with a minimum retreatment interval of 90 days.

SECTION 12

Crop: NON-CROPLAND/INDUSTRIAL SITES (e.g. for use on

rights-of-way for transportation, rights-of-way for utility lines, and in airports, wastelands, industrial parks, etc.)

Treatment Stage: Use 0.833 - 2.08 L/ha early in the summer. For small areas use

 $25 \text{ mL}/100\text{m}^2$.

Susceptible Weeds: Bluebur, Cocklebur, Plantain, Creeping Buttercup, Flixweed*,

Kochia, Horsetail, Lamb's-quarters, Mustards, Prickly Lettuce, Ragweed, Russian Pigweed, Shepherd's Purse, Stinkweed, Wild

Radish.

*Flixweed susceptible only at seedling stage.

Rates to Use: Use 0.833 - 2.08 L/ha early in the summer. For small areas use

 $20.8 \text{ mL}/100\text{m}^2$.

To control tall buttercup, apply 2.25 to 2.8 L for non-cropland broadcast treatments and 2.25 to 3.5 L for non-cropland spot treatments of product per hectare in at least 50 L of water. Apply

when tall buttercup is in the pre-bud to early bud stage.

SECTION 13

Crop: FOR SPRUCE SEEDLINGS FOR REFORESTATION

Treatment Stage: Apply when the spruce seedlings are in the dormant stage or after

the new shoots have hardened off; apply only to seedlings that

are 2 years or older.

Susceptible Weeds: Field Horsetail,

Rates to Use: To control Field Horsetail, apply 583 mL MCPA AMINE 600

Herbicide in 200 L water per hectare by ground application.

Make only one application per year.

For the product to be used on spruce seedlings, a restricted-entry

interval (REI) of 1 day is required

SECTION 14

Tank Mixes with MCPA Amine 600 Herbicide

Use tank mixes only when they are registered and recommended. Read and follow all label directions on both products used in a tank mix. Ensure all components of tank-mix are registered for aerial application.

1. TANK MIX MCPA Amine 600 Herbicide + Banvel® II Herbicide

Crop: WHEAT, BARLEY

Treatment Stage: See MCPA and Banvel II Herbicide labels.

Susceptible Weeds: Weeds susceptible to MCPA plus Canada and Sow Thistle, Wild

Buckwheat, Green Smartweed, Cow Cockle, Hempnettle,

Lady's-thumb.

Rates to Use: Wheat MCPA Amine 600 Herbicide 625 mL/ha

+ Banvel II Herbicide + 290 mL/ha

Barley: MCPA Amine 600 Herbicide 708 mL/ha

+ Banvel II Herbicide + 230 mL/ha

GO TO SECTION 15

2. TANK MIX IN WESTERN CANADA ONLY

MCPA Amine 600 Herbicide + Sencor® 500

Crop: SPRING BARLEY, SPRING WHEAT

Treatment Stage: After weeds emerge and crop is in the 3-5 leaf stage.

Susceptible Weeds: MCPA susceptible weeds plus, Hempnettle, Chickweed,

Volunteer Rapeseed, Tartary Buckwheat.

Rates to Use: Barley: MCPA Amine 600 Herbicide 833 mL/ha

+ Sencor 500 + 275-500 mL/ha

Wheat: MCPA Amine 600 Herbicide 833 mL/ha

+ Sencor 500 +275-425 mL/ha

GO TO SECTION 15

3. TANK MIX A MCPA Amine 600 Herbicide + Mecoprop-P (150 g/L active)

Crop: TURF (INCLUDING FAIRWAYS AND LAWNS)

Treatment Stage: Apply when weeds are young and growing fast for best results.

Susceptible Weeds: MCPA susceptible weeds plus, Common chickweed (Stellaria

media), Mouse-ear chickweed (Cerastium vulgatum), Plantain

(*Plantago sp.*), Clover (*Trifolium spp.*)

Moderately Susceptible Weeds: Buttercup (*Ranunculus spp.*). Spray before flowering.

Creeping charlie (Glechoma hederacea). In early June or

September.

Black medick (*Medicago lupulina*). When young and growing

fast.

Dandelion.

Rates to Use: For control of mix weed populations in seedling grasses:

(in 300 L water/ha) MCPA Amine 600 Herbicide 833 mL – 2.08 L/ha

+ Mecoprop-P (150 g/L active) + 5.5 L/ha

For control of mixed weed populations in established turf:

MCPA Amine 600 Herbicide 833 mL - 2.08 L/ha

+ Mecoprop-P (150 g/L active) + up to 8.5 L/ha

TANK MIX B MCPA Amine 600 Herbicide + Mecoprop-P (150 g/L active)

+ Dicamba (480 g/L active)

Crop: TURF (INCLUDING FAIRWAYS AND LAWNS)

Treatment Stage: Applications under hot/dry conditions may result in yellowing of

turf. Apply when weeds are young and actively growing. Works slower than 2,4-D mixtures and it may take 3 weeks for the weeds to be controlled. Mixtures containing dicamba should not

be used on bentgrass.

Susceptible Weeds: Black Medick, Buttercups, Chickweed (Common & Mouse-ear),

Clovers, Creeping Charlie (Ground Ivy), Curled Dock,

Dandelions, Field and Hedge bindweed, Heal-all, Horsetail, Knot Weed, Lamb's Quarters, Mustard, Pigweed, Plantains, Purslane, Ragweed, Shepherd's Purse, Stickwort, Smartweeds, Wild

Carrot and many other common weeds in turf

Rates to Use: For control of mixed weed populations:

(in 300 L water/ha) MCPA Amine 600 Herbicide 833 mL – 2.08 L

+ Mecoprop-P (150 g/L active) + 3.7 L + Dicamba (480 g/L active) + 150 mL

Consult the labels of the tank-mix partners and observe regions of use specified on the most restrictive labels, and the largest (most restrictive) buffer zone of the products involved in the tank

mixture.

Fertilizer Mixes: MCPA Amine 600 Herbicide or MCPA + Mecoprop-P or MCPA

+ Mecoprop-P + Dicamba may be mixed with liquid fertilizer or

dry fertilizer.

Re-Entry Interval: Do not allow people (other than applicator) or pets on treatment

area during application. Do not enter treated areas until spray has

thoroughly dried.

GO TO SECTION 15

SECTION 15

MIXING AND APPLICATION INSTRUCTIONS

- 1. Fill tank 1/2 full with water. Start agitation.
- 2. Add MCPA Amine 600 Herbicide. For tank mixes, add MCPA first, then the second herbicide.
- 3. Complete filling of tank with water.

- 4. Use 100-240 litres of water per hectare for application by ground equipment unless otherwise specified.
- 5. 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	Crop Buffer Zones (metres) Required for the Protection of:			ection of:			
Application	1		Freshwater Habitat		Estuarine/Marine		Terrestrial
			of Depths:		Habitats of Depths:		Habitat
			Less	Greater	Less	Greater	
			than 1 m	than 1 m	than 1 m	than 1 m	
Field Sprayer*	Cereals, flax, g turf, corn (field sweet), peas (fi canning), legur cropland /indus sites, vegetable rights-of-way,* forestry (spruce seedlings)***	l and eld and mes, non- strial c crops,	1	1	1	1	4
	Terrestrial Food and Feed Crops						
Aerial	Asparagus	Fixed wing	5	1	1	1	85

				T				
	Rotary	5	1	1	1	70		
	wing							
	Fixed	1	0	1	0	60		
	wing 1	0	1	0	60			
Cereals, flax	Rotary		_	_	_			
	wing	1	0	1	0	50		
Legumes	Fixed	1	0	0	0	25		
(incl. peas)	wing							
	Rotary	1	0	0	0	25		
	wing							
C	Fixed	_	1	1	1	100		
Grass	wing	5	1	1	1	100		
pastures	Rotary	rx7	1	1	1	00		
(established)	wing	4	1	1	1	80		
<u> </u>			Non-Crop Uses:					
non-cropland	Fixed	30	1	20	1	200		
/industrial	wing	20	•	20	-	200		
sites,	Rotary	20	1	10	1	100		
including	_	20	1	10	1	100		
	wing							
rights-of-								
way**								

^{*} 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%.

Maximum Applications

Site	Maximum Rate for a Single Application (g a.e./ha)	Cumulative Maximum Rate per Season (g a.e./ha)	Maximum Number of Applications per Year
Fine Turf (fairways/lawns)	1700	-	2
Grass Pastures (established hay and forage)	1750	3500	2
Barley, Oats, Rye, Wheat and Flax	875	875	1
Corn	850	850	1
Non-cropland/industrial sites (broadcast treatment)	1680	3360	2

^{**}Buffer zones for the protection of terrestrial habitats are not required for use on rights-of-way, including railroad ballast, rail and hydro rights-of-way, utility easements, roads, and training grounds and firing ranges on military bases.

^{***}Buffer zones for protection of terrestrial habitats are not required for application to preparation sites for spruce seedlings.

Non-cropland/industrial sites (spot	3360	-	-
treatment)			

Use Precautions for Aerial Application (to cereal crops, flax and established 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 16

SECTION 16

PRECAUTIONS:

- 1. KEEP OUT OF REACH OF CHILDREN.
- 2. Mixers, loaders, and applicators must wear a long-sleeved shirt, long pants, socks, shoes and chemical-resistant gloves. Aerial applicators and applicators using a closed cab are not required to wear chemical-resistant gloves.
- 3. Avoid contact with eyes, skin and clothing. May cause skin irritation. Do not breathe spray mist or vapors.
- 4. **Sensitive Plants -** Vegetables, flowers, grapes, fruit trees and other desirable plants are sensitive to MCPA even in minute quantities. Care should be taken to avoid spraying these types of plants or allowing spray mist to drift onto these plants during both their

- growing and dormant periods. Coarse sprays are less likely to drift. At higher temperatures, vaporization may cause injury to susceptible plants growing nearby.
- 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, coarse sprays, and drop nozzles where possible. Use special care in aerial application where damage from drift can be greater.
- 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 or in same room as seeds, feeds, fertilizers 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 for all agricultural scenarios, unless otherwise indicated.
- 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 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, MCPA Amine 600 Herbicide is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to MCPA Amine 600 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 MCPA Amine 600 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 Loveland Products Canada Inc. at 1-800-328-4678.

GO TO SECTION 17

SECTION 17

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.

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. Treatment of any systemic intoxication should be primarily symptomatic and supportive.

GO TO SECTION 19

SECTION 19

DISPOSAL INFORMATION:

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.

Banvel is a registered trademark of BASF

Sencor is a registered trademark of Bayer

The Loveland Products logo is a registered trademark of Loveland Products, Inc.

Group 4 Herbicide

MCPA AMINE 600 Herbicide

LIQUID

COMMERCIAL READ THE LABEL BEFORE USING

ACTIVE INGREDIENT: MCPA 600 g a.e./L (Present as dimethylamine salt)

REGISTRATION NO: 31432 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 10 litres



Loveland Products Canada Inc. 789 Donnybrook Drive Dorchester, Ontario NOL 1G51-800-328-4678

®T.M. Reg'd. RC 541-0215

(Back Panel)

PRECAUTIONS:

- 1. KEEP OUT OF REACH OF CHILDREN.
- 2. Mixers, loaders, and applicators must wear a long-sleeved shirt, long pants, socks, shoes and chemical-resistant gloves. Aerial applicators and applicators using a closed cab are not required to wear chemical-resistant gloves.
- 3. Avoid contact with eyes, skin and clothing. May cause skin irritation. Do not breathe spray mist or vapors.
- 4. **Sensitive Plants -** Vegetables, flowers, grapes, fruit trees and other desirable plants are sensitive to MCPA even in minute quantities. Care should be taken to avoid spraying these types of plants or allowing spray mist to drift onto these plants during both their growing and dormant periods. Coarse sprays are less likely to drift. At higher temperatures, vaporization may cause injury to susceptible plants growing nearby.
- 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, coarse sprays, and drop nozzles where possible. Use special care in aerial application where damage from drift can be greater.
- 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 or in same room as seeds, feeds, fertilizers 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 for all agricultural scenarios, unless otherwise indicated.
- 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 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.

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

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

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. Treatment of any systemic intoxication should be primarily symptomatic and supportive.

DISPOSAL INFORMATION:

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.

RC 541-0215



MCPA AMINE 600 SUPERSEDES: 12/08/2016 SDS NUMBER: 31432-19-LPI SDS REVISIONS: SEC. 1 **DATE OF ISSUE: 02/04/2019**

IN CASE OF EMERGENCY DUE TO A MAJOR SPILL, FIRE OR POISONING INVOLVING THIS PRODUCT CALL DAY OR NIGHT, 1-800-561-8273 or CHEMTREC 1-800-424-9300

IDENTIFICATION OF THE MATERIAL AND SUPPLIER

REGISTRATION NO. 31432 PEST CONTROL PRODUCTS ACT 1.1 PRODUCT IDENTIFIER:

TRADE NAME: MCPA AMINE 600 HERBICIDE

1.2 RECOMMENDED USE: **GROUP 4 AGRICULTURAL HERBICIDE** 1.3 MANUFACTURED FOR AND DISTRIBUTED BY:

LOVELAND PRODUCTS CANADA, INC.

789 DONNYBROOK DRIVE • DORCHESTER, ONTARIO NOL 1G5

1.4 24 Hour Emergency Phone: (Chemtrec): 1-800-424-9300 (Toll Free) - Additional Emergency Phone 1-800-561-8273

Loveland Technical Service: 1-800-328-4678

U.S. Coast Guard National Response Center: 1-800-424-8802

HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Fue Demone/Irritation	Cotogon, 2A	11340
Eye Damage/Irritation	Category 2A	ПЗ19

2.2 Label elements



WARNING Signal word:

Hazard Statement: H319 - Causes serious eye irritation.

H313 - May be harmful in contact with skin.

Precautionary

Statement: P264 – Wash hands and face thoroughly after handling.

P280 – Wear protective gloves/protective clothing/eye protection/face protection. (Prevention):

Precautionary

Statement: P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

(Response): easy to do. Continue rinsing.

P337+P313 – If eye irritation persists: Get medical advice/attention.

Precautionary Statement:

(Storage): Not required or applicable.

Precautionary Statement:

(Disposal): Not required or applicable.

2.3 Other hazards

None known



SDS REVISIONS: SEC. 1

MCPA AMINE 600

SUPERSEDES: 12/08/2016

COMPOSITION, INFORMATION ON INGREDIENTS

3.2 Mixtures

Other ingredients

Chemical Name: CAS No. Concentration

> [%] 51.78 - 54.98

94-74-6 (4-Chloro-2-methylphenoxy) acetic acid

45.02 - 48.22

Ingredients not listed are proprietary or non-hazardous

FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice: Get medical attention if symptoms occur.

Skin contact: 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.

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 Eye contact:

minutes, then continue rinsing eye. Čall a poison control centre or doctor for treatment advice.

Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Ingestion:

Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an

DATE OF ISSUE: 02/04/2019

unconscious person.

Inhalation: 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 treatment advice.

4.2 Most Important Symptoms and Effects, Acute and Delayed

Symptoms: Causes serious eye irritation. May be harmful in contact with skin.

Immediate Medical Attention and Special Treatment

Treatment: Maintain adequate ventilation and oxygenation of the patient. The decision of whether to induce vomiting or not should be made by a physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed

against toxicity when considering emptying the stomach.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-561-8273

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

NOTES TO PHYSICIAN:

No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the

patient.

FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:

Use foam, carbon dioxide (CO₂), dry powder, halon, or other extinguishing media suitable for the fire. Suitable Extinguishing Media:

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

During a fire, smoke may contain the original material in addition to combustion products of varying Specific Hazards During Firefighting: composition which may be toxic and/or irritating. Combustion products may include and are not

limited to: Oxides of carbon.

5.3 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

Special Protective Equipment for Firefighters: Self-contained breathing apparatus and full protective gear should be worn in fighting large fires involving chemicals. Use water spray to keep fire exposed containers cool. Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this SDS.



SDS REVISIONS: SEC. 1 DATE OF ISSUE: 02/04/2019

MCPA AMINE 600

SUPERSEDES: 12/08/2016

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Personal Precautions: Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. Keep

upwind. Keep out of low areas. Ventilate closed spaces before entering them.

6.2 ENVIRONMENTAL PRECAUTIONS

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not contaminate water.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP

Methods for Clean-Up: Contain or dike spilled material if possible. Should not be released into the environment. Large spills: Dike

the spilled material where this is possible. Dig up heavily contaminated soil. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with small quantities of water. Small spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original

containers for re-use. For waste disposal, see section 13 of the SDS

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Advice on Safe Handling: Avoid contact with eyes, skin and clothing. Do not breathe mist or vapour. Wear personal protective

equipment. Do not use in areas without adequate ventilation. Avoid prolonged exposure. Wash thoroughly after handling. Do not empty into drains. Handle and open container with care. Use care in

handling/storage. Wash before eating, drinking and/or smoking.

7.2 CONDITIONS FOR SAFE STORAGE:

Requirements for Storage Areas and Containers: Store in original containers, tightly closed in secure, safe place away from children. Store

above 0°C. If crystallization occurs because of storage below this temperature, warm product to room temperature and agitate before use. Do not contaminate food, feedstuffs.

or domestic (potable) water supplies.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 CONTROL PARAMETERS:

Not normally required.

8.2 EXPOSURE CONTROLS:

OCCUPATIONAL EXPOSURE LIMITS

Components List Type Value

No listings

Provide adequate general and local exhaust ventilation. Provide eyewash station.

Individual Protection Measures:

Eye / Face Protection: Chemical goggles are recommended.

Skin Protection: Chemical resistant clothing is recommended. Routinely wash work clothing and protective equipment to remove

contaminants. The use of neoprene gloves is recommended. Be aware that the liquid may penetrate the gloves.

Frequent change is advisable.

Respiratory Protection: In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment. Wear respiratory

protection during operations where spraying or misting occurs. Wear air supplied respiratory protection. Wear air

supplied respiratory protection if exposure concentrations are unknown.



SDS NUMBER: 31432-19-LPI SDS REVISIONS: SEC. 1 DATE OF ISSUE: 02/04/2019 SUPERSEDES: 12/08/2016

MCPA AMINE 600

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 APPEARANCE : Liquid ODOUR: Fishy.

ODOUR THRESHOLD: No data available.
COLOUR: Brown.
pH: 8.1 – 8.5

MELTING POINT / FREEZING POINT: No data / Freezing Point: -3°C BOILING POINT: 100°C.

FLASH POINT: 100°C. > 100°C (TCC)

FLAMMABILITY (solid, gas): This product is not flammable.

UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: Not applicable.

VAPOR PRESSURE: No data available.

SOLUBILITY: Miscible.

PARTITION CO-EFFICIENT, n-OCTANOL / WATER: No data available.

AUTO-IGNITION TEMPERATURE: No data available. DECOMPOSITION TEMPERATURE: No data available. VISCOSITY: 34.4 cps @ 20°C SPECIFIC GRAVITY (Water = 1): 1.1448 g/ml @ 20°C

DENSITY: 1.14 kg/L

Note: These physical data are typical values based on material tested but may vary from sample to sample.

Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

10.1 REACTIVITY

Stable

10.2 CHEMICAL STABILITY

Stable under normal conditions.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No reactions known under normal use conditions. Will not polymerize.

10.4 CONDITIONS TO AVOID

Excessive temperatures. Product may boil and then burn.

10.5 INCOMPATIBILE MATERIALS

Acids and oxidizing agents.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Decomposition products can include and are not limited to: hydrogen chloride and oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

11.1 LIKELY ROUTES OF EXPOSURE

Skin contact, eye contact.

LC₅₀ (rat): No data available

LD₅₀ Oral (rat): 1,611 mg/kg

LD₅₀ Dermal (rat): >5,000 mg/kg

Acute Toxicity Estimates: No data available

Skin Irritation (rabbit): Slight irritant

Eye Irritation (rabbit): Irritant

Specific Target Organ Toxicity: Single exposure: No data available.

Aspiration: No data available

Skin Sensitization (guinea pig): Not a sensitizer

Carcinogenicity: Possible carcinogenicity. IARC 2B (Possibly Carcinogenic to Humans)

Germ Cell Mutagenicity: No data available

Interactive Effects: None known



SDS NUMBER: 31432-19-LPI SDS REVISIONS: SEC. 1 DATE OF ISSUE: 02/04/2019

MCPA AMINE 600

SUPERSEDES: 12/08/2016

12. ECOLOGICAL INFORMATION

12.1 ECOTOXICITY

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a

harmful or damaging effect on the environment.

Toxicity to fish: LC₅₀ Rainbow trout (Oncor

 LC_{50} Rainbow trout (Oncorhynchus mykiss) 230 mg/L, 96 hours LC_{50} Bluegill 310 mg/L, 96 hours

Toxicity to daphnia and other aquatic invertebrates: EC₅₀ Daphnia magna 190 mg/L, 48 hours

Drift or runoff may adversely affect non-target plants.

Do not apply directly to water.

Do not contaminate water when disposing of equipment wash water. Do not apply when weather conditions favor drift from target area.

12.2 PERSISTENCE AND DEGRADABILITY

Biodegradability: The product is not readily biodegradable

12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulation: No data available.

12.4 MOBILITY IN SOIL

Expected to be very high in soil.

12.5 OTHER ADVERSE EFFECTS

Assessment: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Do not reuse containers for any purpose. Container is recyclable, and is to be disposed of at a container collection site. Contact your local dealer/distributor for the location of the nearest collection site. Before taking container to the collection site: Triple or pressure-rinse the empty container, adding the rinsate to the spray tank. Make the empty 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. Do not contaminate water, food or feed by storage or disposal.

14. TRANSPORT INFORMATION

14.1 LAND TRANSPORT

TDG / DOT Shipping Description: NOT REGULATED

U.S. Surface Freight Classification: COMPOUND, TREE OR WEED KILLING, NOI (NMFC 50320, SUB 2: CLASS: 60)

15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS

NFPA & HMIS Hazard Ratings: NFPA HMIS

2 Health Health 0 Least Flammability Slight Flammability Moderate Instability 2 0 Reactivity 3 High Χ PPE

4 Severe

CEPA - Domestic Substances List (DSL): All substances in this product are listed on the DSL or not required to be listed

Hazardous Products Act Information: CPR Compliance: This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

WHMIS Classification: D2B

National Fire Code of Canada: Not applicable.



SDS REVISIONS: SEC. 1

MCPA AMINE 600

SUPERSEDES: 12/08/2016

16. OTHER INFORMATION

SDS STATUS: Section 1 revised.

PREPARED BY: Product Stewardship and Regulatory Affairs

REVIEWED BY: Safety, Health and Environment

DATE OF ISSUE: 02/04/2019

PCP (Pest Control Products Act) Registration No. 31432

Disclaimer and Limitation of Liability: This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and LOVELAND PRODUCTS CANADA, INC. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.

(Booklet)

Group 4 Herbicide

MCPA AMINE 600 Herbicide

LIQUID

COMMERCIAL READ THE LABEL BEFORE USING

ACTIVE INGREDIENT: MCPA 600 g a.e./L (Present as dimethylamine salt)

REGISTRATION NO: 31432 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 10 litres



Loveland Products Canada Inc. 789 Donnybrook Drive Dorchester, Ontario NOL 1G51-800-328-4678

®T.M. Reg'd. RC 541-0215

LABEL INDEX MCPA Amine 600 Herbicide

Wheat, Barley, Rye, Oats	GO TO SECTION 1	FORAGE LEGUMES (ALFALFA AND BIRDSFOOT TREFOIL) (direct and underseeded)	GO TO SECTION 10
Flax (Excluding Low Linoleic Acid Varieties)	GO TO SECTION 2	ESTABLISHED LEGUMES (ALFALFA; except early maturing varieties, CLOVER (ALSIKE and RED)	GO TO SECTION 11
Winter Wheat, Fall Rye	GO TO SECTION 3	NON- CROPLAND/INDUSTRIAL SITES (e.g. for use on rights-of-way for transportation, rights-of-way for utility lines, and in airports, wastelands, industrial parks, etc.	GO TO SECTION 12
Grass Pastures (Established)	GO TO SECTION 4	FOR SPRUCE SEEDLINGS FOR REFORESTATION	GO TO SECTION 13
Turf (Including Fairways and Lawns)	GO TO SECTION 5	Tank Mixes	GO TO SECTION 14
Corn (Field and Sweet)	GO TO SECTION 6	Mixing & Application Instructions	GO TO SECTION 15
Peas (Field & Canning) Except Nova Scotia	GO TO SECTION 7	Precautions	GO TO SECTION 16
ASPARAGUS	GO TO SECTION 8	First Aid	GO TO SECTION 17
SMALL GRAINS UNDERSEEDED WITH A LEGUME	GO TO SECTION 9	Toxicological Information	GO TO SECTION 18
		Rinsing and Disposal	GO TO SECTION 19

DIRECTIONS FOR USE:

SECTION 1

Crop: WHEAT, BARLEY, RYE, OATS

Treatment Stage:

Wheat, Barley, Spring Rye: Ground or air application. Treat from 4th leaf stage to just before

the flag leaf (shot blade) stage.

Oats: Ground or air application. Oats may be treated from emergence.

Use lowest rate on oats treated in the 3-6 leaf stage.

NOTE: Do not treat cereals underseeded to legumes.

Susceptible Weeds: Burdock, Cocklebur, Mustards (except Dog Mustard), Ragweed,

Flixweed*, Kochia, Lamb's-quarters, Russian Pigweed,

Shepherd's Purse, Stinkweed.

*Flixweed susceptible only at seedling stage. Use rates for harder to kill weeds to kill Fall germinated flixweed in the

Spring.

Rates to Use on Susceptible Weeds:

Small seedlings, good growing conditions:

Weeds in bud, dry or cool conditions, heavy infestation:

583 mL/ha
917 mL/ha

Harder to Kill Weeds: Annual Sow Thistle*, Bluebur, Blue Lettuce*, Canada Thistle*,

Peppergrass, Curled Dock, DogMustard, Goosefoot, Hempnettle

(Suppression Only), Redroot Pigweed, Russian Thistle*,

Perennial Sow Thistle*, Leafy Spurge*.

*Top growth control only.

Rates to use on Harder to Kill Weeds:

Small seedlings, good growing conditions:

1.04 L/ha
Weeds in bud, dry or cool conditions, heavy infestations:

1.46 L/ha

NOTE: Rates above 917 mL/ha may cause crop injury.

Do not apply more than once per year.

GO TO SECTION 15

SECTION 2

Crop: FLAX (LINSEED) (Excluding low-linolenic acid varieties)

Treatment Stage: Ground or air application. Treat after plants reach 5 cm in height

and before budding.

Susceptible Weeds: Burdock, Cocklebur, Mustards (except Dog Mustard), Ragweed,

Flixweed*, Kochia, Lamb's-quarters, Russian Pigweed,

Shepherd's Purse, Stinkweed.

*Flixweed susceptible only at seedling stage. Use rates for harder to kill weeds to kill fall germinated flixweed in the spring.

Rates to Use on Susceptible Weeds:

Small seedlings, good growing conditions:

Weeds in bud, adverse weather, heavy infestation:

583 mL/ha
917 mL/ha

NOTE: Rates above 708 mL/ha may cause injury.

GO TO SECTION 15

SECTION 3

Crop: WINTER WHEAT, FALL RYE

Treatment Stage: Ground or air application. Treat in Spring from time crop

commences growth to flag leaf stage.

NOTE: 1. Do not treat crops underseeded to legumes.

2. Doses above 417 mL/ha applied between the 3rd and

6th leaf **may** cause injury.

Susceptible Weeds: Burdock, Cocklebur, Mustards (except Dog Mustard), Ragweed,

Flixweed*, Kochia, Lamb's-quarters, Russian Pigweed,

Shepherd's Purse, Stinkweed.

*Flixweed susceptible only at seedling stage. Use rates for

harder to kill weeds to kill fall germinated flixweed in the spring.

Rates to Use on Susceptible Weeds:

Susceptible weeds, good growing conditions: 458 mL/ha Weeds in bud, adverse conditions, heavy infestations: 917 mL/ha

Do not apply more than once per year.

GO TO SECTION 15

SECTION 4

Crop: GRASS PASTURES (Established)

Treatment Stage: Ground or air application. Treat in Spring or Fall (good growing

conditions) for best results.

Susceptible Weeds: Bluebur, Cocklebur, Plaintain, Creeping Buttercup, Flixweed,

Kochia, Horsetail, Lamb's-quarters, Mustards, Prickly Lettuce, Ragweed, Russian Pigweed, Shepherd's Purse, Stinkweed, Wild

Radish.

Rates to Use on Susceptible Weeds:

1.67 L/ha

Harder to Kill Weeds: Blue Lettuce*, Canada Thistle*, Curled Dock, Dandelions, Dog

Mustard, Goatsbeard, Goosefoot, Hempnettle (Suppression), Leafy Spurge, Peppergrass, Redroot Pigweed, Sow Thistle*,

Tumbleweed. *Top Kill Only.

Rates to use on Harder to Kill Weeds:

2.92 L/ha

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

Crop: TURF (INCLUDING FAIRWAYS AND LAWNS)

Treatment Stage: Lawns: DO NOT APPLY BY AIR. Do not apply more than two

broadcast applications

per season. This does not include spot treatments. Apply when

weeds are young and growing fast for best results.

Susceptible Weeds: MCPA Amine 600 Alone[†]

Cocklebur, Common Plaintain, Creeping Buttercup, Flixweed, Kochia, Field Horsetail, Lamb's-quarters, Mustards, Prickly Lettuce, Ragweed, Russian Pigweed, Shepherd's Purse,

Stinkweed, Wild Radish. Dandelions

Harder to Kill Weeds: Blue Lettuce*, Canada Thistle*, Curled Dock, , Dog Mustard,

Goatsbeard*, Goosefoot, Hempnettle*, Leafy Spurge*, Peppergrass, Redroot Pigweed, Perennial Sow Thistle*,

Tumbleweed*. Bluebur

[†]See tank mixtures in Section 14 for additional weed control

options in turf
*Top Kill Only

Rates to Use (in 300 L of water/ha):

Small seedlings, good growing conditions: Larger weeds, adverse conditions, heavy infestation: 833 mL/ha 2.08 L/ha

For smaller areas, 20.83 mL in 10 L of water treats 100 m²

Crop: CORN (Field and Sweet)

Treatment Stage: Ground Application ONLY. Treat before corn is 15 cm high.

Susceptible Weeds: Controls Atrazine resistant and other susceptible broadleaf

weeds. (See Section 1 for list of weeds.)

Rates to Use:

Small seedlings, good growing conditions:

Larger weeds, adverse conditions, heavy infestation:

1.04 L/ha

Do not apply more than once per year.

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

GO TO SECTION 15

SECTION 7

Crop: PEAS, FIELD AND CANNING (Except Nova Scotia). Do not

combine with Malathion.

Treatment Stage: Spray when vine length is 10-20 cm. **DO NOT APPLY BY**

AIR.

Susceptible Weeds: Mustards (except Dog Mustard), Ragweed, Flixweed, Kochia,

Lamb's-quarters, Russian Pigweed, Shepherd's Purse,

Stinkweed.

Rates to Use:

Small seedlings, good growing conditions:

275 mL/ha
Larger weeds, adverse conditions, heavy infestations:

458 mL/ha

Crop: ASPARAGUS

Treatment Stage: Treat asparagus with MCPA AMINE 600 Herbicide following a

cultivation, just before first spears appear. Treatment may be

repeated at end of cutting season.

Susceptible Weeds: Burdock, Cocklebur, Mustards (except Dog Mustard), Ragweed,

Flixweed*, Kochia, Lamb's-quarters, Russian Pigweed,

Shepherd's Purse, Stinkweed.

*Flixweed susceptible only at seedling stage.

Rates to Use: Use 3.13 L/ha.

For asparagus, a maximum of 2 applications is permitted per season with a minimum retreatment interval of 21 days.

SECTION 9

Crop: SMALL GRAINS UNDERSEEDED WITH A LEGUME

Treatment Stage: MCPA AMINE 600 Herbicide may be used on grain interplanted

with alfalfa, (except early maturing varieties), red clover, ladino clover and alsike. Do not use on grain interplanted with sweet

clover or birdsfoot trefoil.

Susceptible Weeds: Burdock, Cocklebur, Mustards (except Dog Mustard), Ragweed,

Flixweed*, Kochia, Lamb's-quarters, Russian Pigweed,

Shepherd's Purse, Stinkweed.

*Flixweed susceptible only at seedling stage.

Rates to Use: Spray with not more than 0.292 - 0.583 L/ha when legumes are

at about the second true leaf stage.

SECTION 10

Crop: FORAGE LEGUMES (ALFALFA AND BIRDSFOOT

TREFOIL) (direct and underseeded)

Treatment Stage: For established legumes,

Susceptible Weeds: Bluebur, Cocklebur, Plantain, Creeping Buttercup, Flixweed*,

Kochia, Horsetail, Lamb's-quarters, Mustards, Prickly Lettuce, Ragweed, Russian Pigweed, Shepherd's Purse, Stinkweed, Wild

Radish.

*Flixweed susceptible only at seedling stage.

Rates to Use: The use of MCPA AMINE 600 Herbicide at 58.3 mL/ha (0.058)

L/ha) and CALIBER 625 (1.25 L/ha) provides better control of wild mustard plants beyond the four-leaf stage of the mustards.

This tank mix may increase crop stunting.

For established legumes, a maximum of 2 applications is permitted per season, with a minimum retreatment interval of 90 days.

SECTION 11

Crop: ESTABLISHED LEGUMES (ALFALFA; except early

maturing varieties, CLOVER (ALSIKE and RED)):

Treatment Stage: For established legumes,

Susceptible Weeds: Bluebur, Cocklebur, Plantain, Creeping Buttercup, Flixweed*,

Kochia, Horsetail, Lamb's-quarters, Mustards, Prickly Lettuce, Ragweed, Russian Pigweed, Shepherd's Purse, Stinkweed, Wild

Radish.

*Flixweed susceptible only at seedling stage.

Rates to Use: Application should be made at 0.833 – 1.25 L L/ha in the late fall

after the legume tops have been killed by frost. Legumes may be injured at higher rates. Do not used on sweet clover. Spring applications should be made at 0.833 L/ha before legumes and

grasses start active growth. Treat at an early stage of

development of the legumes and when they are covered by a

canopy of winter weeds

For established legumes, a maximum of 2 applications is permitted per season, with a minimum retreatment interval of 90 days.

SECTION 12

Crop: NON-CROPLAND/INDUSTRIAL SITES (e.g. for use on

rights-of-way for transportation, rights-of-way for utility lines, and in airports, wastelands, industrial parks, etc.)

Treatment Stage: Use 0.833 - 2.08 L/ha early in the summer. For small areas use

 $25 \text{ mL}/100\text{m}^2$.

Susceptible Weeds: Bluebur, Cocklebur, Plantain, Creeping Buttercup, Flixweed*,

Kochia, Horsetail, Lamb's-quarters, Mustards, Prickly Lettuce, Ragweed, Russian Pigweed, Shepherd's Purse, Stinkweed, Wild

Radish.

*Flixweed susceptible only at seedling stage.

Rates to Use: Use 0.833 - 2.08 L/ha early in the summer. For small areas use

 $20.8 \text{ mL}/100\text{m}^2$.

To control tall buttercup, apply 2.25 to 2.8 L for non-cropland broadcast treatments and 2.25 to 3.5 L for non-cropland spot treatments of product per hectare in at least 50 L of water. Apply

when tall buttercup is in the pre-bud to early bud stage.

SECTION 13

Crop: FOR SPRUCE SEEDLINGS FOR REFORESTATION

Treatment Stage: Apply when the spruce seedlings are in the dormant stage or after

the new shoots have hardened off; apply only to seedlings that

are 2 years or older.

Susceptible Weeds: Field Horsetail,

Rates to Use: To control Field Horsetail, apply 583 mL MCPA AMINE 600

Herbicide in 200 L water per hectare by ground application.

Make only one application per year.

For the product to be used on spruce seedlings, a restricted-entry

interval (REI) of 1 day is required

SECTION 14

Tank Mixes with MCPA Amine 600 Herbicide

Use tank mixes only when they are registered and recommended. Read and follow all label directions on both products used in a tank mix. Ensure all components of tank-mix are registered for aerial application.

1. TANK MIX MCPA Amine 600 Herbicide + Banvel® II Herbicide

Crop: WHEAT, BARLEY

Treatment Stage: See MCPA and Banvel II Herbicide labels.

Susceptible Weeds: Weeds susceptible to MCPA plus Canada and Sow Thistle, Wild

Buckwheat, Green Smartweed, Cow Cockle, Hempnettle,

Lady's-thumb.

Rates to Use: Wheat MCPA Amine 600 Herbicide 625 mL/ha

+ Banvel II Herbicide + 290 mL/ha

Barley: MCPA Amine 600 Herbicide 708 mL/ha

+ Banvel II Herbicide + 230 mL/ha

GO TO SECTION 15

2. TANK MIX IN WESTERN CANADA ONLY

MCPA Amine 600 Herbicide + Sencor® 500

Crop: SPRING BARLEY, SPRING WHEAT

Treatment Stage: After weeds emerge and crop is in the 3-5 leaf stage.

Susceptible Weeds: MCPA susceptible weeds plus, Hempnettle, Chickweed,

Volunteer Rapeseed, Tartary Buckwheat.

Rates to Use: Barley: MCPA Amine 600 Herbicide 833 mL/ha

+ Sencor 500 + 275-500 mL/ha

Wheat: MCPA Amine 600 Herbicide 833 mL/ha

+ Sencor 500 +275-425 mL/ha

GO TO SECTION 15

3. TANK MIX A MCPA Amine 600 Herbicide + Mecoprop-P (150 g/L active)

Crop: TURF (INCLUDING FAIRWAYS AND LAWNS)

Treatment Stage: Apply when weeds are young and growing fast for best results.

Susceptible Weeds: MCPA susceptible weeds plus, Common chickweed (Stellaria

media), Mouse-ear chickweed (Cerastium vulgatum), Plantain

(*Plantago sp.*), Clover (*Trifolium spp.*)

Moderately Susceptible Weeds: Buttercup (*Ranunculus spp.*). Spray before flowering.

Creeping charlie (Glechoma hederacea). In early June or

September.

Black medick (*Medicago lupulina*). When young and growing

fast.

Dandelion.

Rates to Use: For control of mix weed populations in seedling grasses:

(in 300 L water/ha) MCPA Amine 600 Herbicide 833 mL – 2.08 L/ha

+ Mecoprop-P (150 g/L active) + 5.5 L/ha

For control of mixed weed populations in established turf:

MCPA Amine 600 Herbicide 833 mL - 2.08 L/ha

+ Mecoprop-P (150 g/L active) + up to 8.5 L/ha

GO TO SECTION 15

TANK MIX B MCPA Amine 600 Herbicide + Mecoprop-P (150 g/L active)

+ Dicamba (480 g/L active)

Crop: TURF (INCLUDING FAIRWAYS AND LAWNS)

Treatment Stage: Applications under hot/dry conditions may result in yellowing of

turf. Apply when weeds are young and actively growing. Works slower than 2,4-D mixtures and it may take 3 weeks for the weeds to be controlled. Mixtures containing dicamba should not

be used on bentgrass.

Susceptible Weeds: Black Medick, Buttercups, Chickweed (Common & Mouse-ear),

Clovers, Creeping Charlie (Ground Ivy), Curled Dock,

Dandelions, Field and Hedge bindweed, Heal-all, Horsetail, Knot Weed, Lamb's Quarters, Mustard, Pigweed, Plantains, Purslane, Ragweed, Shepherd's Purse, Stickwort, Smartweeds, Wild

Carrot and many other common weeds in turf

Rates to Use: For control of mixed weed populations:

(in 300 L water/ha) MCPA Amine 600 Herbicide 833 mL – 2.08 L

+ Mecoprop-P (150 g/L active) + 3.7 L + Dicamba (480 g/L active) + 150 mL

Consult the labels of the tank-mix partners and observe regions of use specified on the most restrictive labels, and the largest (most restrictive) buffer zone of the products involved in the tank

mixture.

Fertilizer Mixes: MCPA Amine 600 Herbicide or MCPA + Mecoprop-P or MCPA

+ Mecoprop-P + Dicamba may be mixed with liquid fertilizer or

dry fertilizer.

Re-Entry Interval: Do not allow people (other than applicator) or pets on treatment

area during application. Do not enter treated areas until spray has

thoroughly dried.

GO TO SECTION 15

SECTION 15

MIXING AND APPLICATION INSTRUCTIONS

- 1. Fill tank 1/2 full with water. Start agitation.
- 2. Add MCPA Amine 600 Herbicide. For tank mixes, add MCPA first, then the second herbicide.
- 3. Complete filling of tank with water.

- 4. Use 100-240 litres of water per hectare for application by ground equipment unless otherwise specified.
- 5. 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	Crop	Buffer Zones (metres) Required for the Protection of:					
Application	-		Freshwater Habitat		Estuarine/Marine		Terrestrial
			of Depths:		Habitats of Depths:		Habitat
			Less	Greater	Less	Greater	
			than 1 m	than 1 m	than 1 m	than 1 m	
Field Sprayer*	Cereals, flax, grasses, turf, corn (field and sweet), peas (field and canning), legumes, non- cropland /industrial sites, vegetable crops, rights-of-way,** forestry (spruce seedlings)***		1	1	1	1	4
	Terrestrial Food and Feed Crops						
Aerial	Asparagus	Fixed wing	5	1	1	1	85

				1	1		
		Rotary	5	1	1	1	70
		wing					
		Fixed	ixed	0		0	60
		wing 1	0	1	0	60	
	Cereals, flax	Rotary	_	_			
		wing 1	0	1	0	50	
	Legumes	Fixed	1	0	0	0	25
	(incl. peas)	wing					
		Rotary	1	0	0	0	25
		wing					
	Grass pastures	Fixed	5	1	1	1	100
		wing					
		Rotary	1	1	1	1	80
	(established)	wing 4	4				
	Non-Crop Uses:						
	non-cropland	Fixed	30	1	20	1	200
	/industrial	wing	20	•		1	200
	sites,	Rotary	20	1	10	1	100
	including	_	20	1	10	1	100
		wing					
	rights-of-						
	way**						

^{*} 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%.

Maximum Applications

Site	Maximum Rate for a Single Application (g a.e./ha)	Cumulative Maximum Rate per Season (g a.e./ha)	Maximum Number of Applications per Year
Fine Turf (fairways/lawns)	1700	-	2
Grass Pastures (established hay and forage)	1750	3500	2
Barley, Oats, Rye, Wheat and Flax	875	875	1
Corn	850	850	1
Non-cropland/industrial sites (broadcast treatment)	1680	3360	2

^{**}Buffer zones for the protection of terrestrial habitats are not required for use on rights-of-way, including railroad ballast, rail and hydro rights-of-way, utility easements, roads, and training grounds and firing ranges on military bases.

^{***}Buffer zones for protection of terrestrial habitats are not required for application to preparation sites for spruce seedlings.

Non-cropland/industrial sites (spot	3360	-	-
treatment)			

Use Precautions for Aerial Application (to cereal crops, flax and established 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 16

SECTION 16

PRECAUTIONS:

- 1. KEEP OUT OF REACH OF CHILDREN.
- 2. Mixers, loaders, and applicators must wear a long-sleeved shirt, long pants, socks, shoes and chemical-resistant gloves. Aerial applicators and applicators using a closed cab are not required to wear chemical-resistant gloves.
- 3. Avoid contact with eyes, skin and clothing. May cause skin irritation. Do not breathe spray mist or vapors.
- 4. **Sensitive Plants -** Vegetables, flowers, grapes, fruit trees and other desirable plants are sensitive to MCPA even in minute quantities. Care should be taken to avoid spraying these types of plants or allowing spray mist to drift onto these plants during both their

- growing and dormant periods. Coarse sprays are less likely to drift. At higher temperatures, vaporization may cause injury to susceptible plants growing nearby.
- 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, coarse sprays, and drop nozzles where possible. Use special care in aerial application where damage from drift can be greater.
- 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 or in same room as seeds, feeds, fertilizers 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 for all agricultural scenarios, unless otherwise indicated.
- 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 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, MCPA Amine 600 Herbicide is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to MCPA Amine 600 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 MCPA Amine 600 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 Loveland Products Canada Inc. at 1-800-328-4678.

GO TO SECTION 17

SECTION 17

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.

GO TO SECTION 18

SECTION 18

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. Treatment of any systemic intoxication should be primarily symptomatic and supportive.

GO TO SECTION 19

SECTION 19

DISPOSAL INFORMATION:

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.

Banvel is a registered trademark of BASF

Sencor is a registered trademark of Bayer

The Loveland Products logo is a registered trademark of Loveland Products, Inc.

Group 4 Herbicide

MCPA AMINE 600 Herbicide

LIQUID

COMMERCIAL READ THE LABEL BEFORE USING

ACTIVE INGREDIENT: MCPA 600 g a.e./L (Present as dimethylamine salt)

REGISTRATION NO: 31432 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 10 litres



Loveland Products Canada Inc. 789 Donnybrook Drive Dorchester, Ontario NOL 1G51-800-328-4678

®T.M. Reg'd. RC 541-0215

(Back Panel)

PRECAUTIONS:

- 1. KEEP OUT OF REACH OF CHILDREN.
- 2. Mixers, loaders, and applicators must wear a long-sleeved shirt, long pants, socks, shoes and chemical-resistant gloves. Aerial applicators and applicators using a closed cab are not required to wear chemical-resistant gloves.
- 3. Avoid contact with eyes, skin and clothing. May cause skin irritation. Do not breathe spray mist or vapors.
- 4. **Sensitive Plants -** Vegetables, flowers, grapes, fruit trees and other desirable plants are sensitive to MCPA even in minute quantities. Care should be taken to avoid spraying these types of plants or allowing spray mist to drift onto these plants during both their growing and dormant periods. Coarse sprays are less likely to drift. At higher temperatures, vaporization may cause injury to susceptible plants growing nearby.
- 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, coarse sprays, and drop nozzles where possible. Use special care in aerial application where damage from drift can be greater.
- 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 or in same room as seeds, feeds, fertilizers 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 for all agricultural scenarios, unless otherwise indicated.
- 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 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.

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

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

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. Treatment of any systemic intoxication should be primarily symptomatic and supportive.

DISPOSAL INFORMATION:

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.

RC 541-0215