

GROUP	4	HERBICIDE
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WILSON®
BROADEX MCPA WEED KILLER SOLUTION

AGRICULTURAL

For the control of broadleaf weeds in wheat, oats, barley, rye, flax,
asparagus and peas by means of ground or aerial application.

GUARANTEE: MCPA, present as sodium and potassium salts... 300 g a.e./L

REGISTRATION NO. 21949 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 2 L, 4 L, 10 L, 20 L, 205 L

READ THE LABEL BEFORE USING

KEEP OUT OF REACH OF CHILDREN



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General Information:

- 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.
- 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.

DIRECTIONS FOR USE:

Buffer Zones to Protect Sensitive Habitat:

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.

Buffer Zones (metres) Required for the Protection of:							
Method of Application	Crop	Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:		Terrestrial Habitat	
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m		
Field sprayer*	Cereals, flax, grasses, legumes, vegetable crops	1	1	1	1	4	
Aerial	Terrestrial Food and Feed Crops						
	Asparagus	Fixed	5	1	1	1	85
		Rotary wing	5	1	1	1	70
	Cereals, flax	Fixed wing	1	0	1	0	60
		Rotary wing	1	0	1	0	50
	Grasses	Fixed wing	1	0	1	1	75
		Rotary wing	1	0	1	1	60
	Legumes, peas	Fixed wing	1	0	0	0	25
		Rotary wing	1	0	0	0	25

*For field sprayer application, buffer zones can be reduced with the use of drift-reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy, the labelled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy, the labelled buffer zone can be reduced by 30%.

CROP USE:

GROUND APPLICATION: Apply at a rate of 50 to 200 L of spray solution per hectare, depending on the type of application equipment used. Sufficient water must be used to ensure even distribution. Spray at low pressure, i.e. between 200 and 275 kPa, when weeds are actively growing.

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: Apply a minimum of 30 L of spray solution per hectare depending on the type of the application system being used. Do not spray at boom pressures higher than 235 kPa. Avoid placing nozzles where spray will enter wing tip rotary air currents. This method of application includes fixed and rotary wing aircraft.

AERIAL APPLICATION:

The spray mist may drift onto sensitive plants when the wind comes up. Spray only when wind is blowing away from a sensitive crop, shelterbelt or garden. 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 wingspan or rotorspan.

Preparation of Spray Solution: Add water to spray tank until ½ full. Then with agitation add the required amount of Wilson[®] Broadex MCPA Weed Killer Solution, then complete filling with water and mix thoroughly.

Selective Weed Control in Small Grains (not underseeded to legumes): Do not use on grain interplanted with a legume. Weeds differ in their susceptibility to Wilson[®] Broadex MCPA Weed Killer Solution and not all types can be controlled satisfactorily in crops. The amount of product to use will depend upon the susceptibility and whether the crops will tolerate this amount. Please see the chart titled “Application: Suggested Amount of Wilson[®] Broadex MCPA Weed Killer Solution for Weed Control in Cereals and Flax (not underseeded to legumes).”

Oats: Oats are more tolerant to MCPA than 2,4-D. Spray when conditions of weeds warrant up to the flag-leaf stage (shot blade). Do not apply more than once per year.

Wheat, Barley, Rye: Wilson[®] Broadex MCPA Weed Killer Solution is used for the control of susceptible weeds in wheat, barley and rye. Treatments can be made from the 3-leaf expanded to the early flag-leaf stage, and again from the milk stage to full maturity. Treatments made between emergence and 3-leaf stage may cause some crop injury, but are less likely to with Wilson[®] Broadex MCPA Weed Killer Solution than with 2,4-D amines. Winter wheat and fall rye should be treated in early spring, as soon as weeds appear and when the crop is in full tillering stage to the shot-blade stage. Do not apply more than once per year.

Flax (linseed) (DO NOT USE ON LOW LINOLENIC ACID VARIETIES): Treat flax with Wilson[®] Broadex MCPA Weed Killer Solution when flax is 5 cm tall to just before the buds begin to form. When control of MCPA resistant weeds is required, use 2,4-D Amine 500; however, some crop injury to the flax should be expected. Rates of Wilson[®] Broadex MCPA Weed Killer Solution over 1.75 L/ha may cause a delay in maturity which is usually more than offset by increased yield caused by weed control. Do not apply more than once per year.

Application: Suggested Amount of Wilson[®] Broadex MCPA Weed Killer Solution for Weed Control in Cereals and Flax (not underseeded to legumes)

Mixed Weedy Growth	Stage of Weed/ Kind of Weather	L/ha
Susceptible, easier-to-kill weeds such as: burdock, cocklebur, stinkweed, flixweed, kochia, lamb's-quarters, mustard (except dog and green tansy), prickly lettuce, ragweeds, Russian pigweed, shepherd's purse, annual sunflower, vetch, wild radish, *field horsetail, *hoary cress, *plantain	Seedling (2-4 leaves) Growing rapidly	1.2
	Weeds in bud Dry, cool weather Heavy infestation	1.75
More resistant, hard-to-kill weeds such as biennial wormwood, bluebur, dog mustard, field peppergrass, hairy galinsoga, hemp nettle, goatsbeard, oakleaf goosefoot, dandelion, redroot pigweed, smartweed, annual sowthistle, sweet clover, tartary buckwheat, tumbleweed, *blue lettuce, *Canada thistle, *burdocks, *field bindweed, *gumweed, *hedge bindweed, *lady's thumb, *perennial sowthistle, *tansy.	Seedling (2-4 leaves) Growing rapidly	2.0+
	Weeds in bud Dry or cool weather Heavy infestation	2.75+
+ The higher rates may cause deformities and delayed maturity which will be offset by a higher relative yield from a less weedy crop. * Top growth control only.		

Selective Weed Control in Small Grain Underseeded with a legume: Wilson[®] Broadex MCPA Weed Killer Solution may be used on grain interplanted with alfalfa (except Flemish types such as alfa or dupuits alfalfa), red clover, ladino clover and alsike. Do not use on grain interplanted with sweet clover or birdsfoot trefoil. Spray with no more than 700 mL/ha on alfalfa and no more than 1.3 L/ha on red clover, ladino and alsike when legumes are at about the 2nd true leaf stage. Do not apply more than once per year.

Asparagus: Treat asparagus with Wilson[®] Broadex MCPA Weed Killer Solution following a cultivation just before the first spears appear. Use 5.5 L/ha. Treatment may be repeated at end of cutting season. Use 250–400 L/ha of water. For asparagus, a maximum of 2 applications is permitted per season with a minimum retreatment interval of 21 days.

Peas: Field and canning peas should be treated with Wilson[®] Broadex MCPA Weed Killer Solution at 1 L/ha when 10–20 cm tall, using not less than 150 L/ha of water. Do not use on peas grown in the Maritimes.

Established Grasses – Eastern Canada: For the control of yellow rocket and other susceptible winter annual weeds, spray with 3.75 L/ha of Wilson[®] Broadex MCPA Weed Killer Solution. Application should be made in early fall. For established grasses, a maximum of 2 applications is permitted per season, with a minimum retreatment interval of 90 days.

Established Alfalfa and Grasses – Western Canada: To control such susceptible weeds as horsetail, hoary cress and shepherd's purse and other perennials or winter annuals, spray with Wilson[®] Broadex MCPA Weed Killer Solution at 1.75 to 3.25 L/ha before growth of legumes and grasses starts in the spring. For established alfalfa and grasses, a maximum of 2 applications is permitted per season, with a minimum retreatment interval of 90 days.

RESISTANCE MANAGEMENT: For resistance management, Wilson[®] Broadex MCPA Weed Killer Solution is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to Wilson[®] Broadex MCPA Weed Killer Solution 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 Wilson MCPA Amine 500 Liquid Weed Killer or other Group 4 herbicides with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group when such use is permitted.
- Herbicide use should be based on an IPM program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical), cultural, biological and other chemical control practices.
- Monitor treated weed populations for resistance development.
- Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.

- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact an Agrium Advanced Technologies representative at 1-800-461-6471 or at www.agriumat.com.

PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN. Harmful if swallowed or absorbed through skin. DANGER – eye irritant. Do not breathe spray mist. Remove contaminated clothing and wash before re-use. Wash thoroughly with soap and water after handling.

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.

Personal Protective Equipment and Restricted-Entry Intervals Relating to Occupational Exposure:

Ground application:

- 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.
- Re-entry is not permitted until 12 hours after application for all agricultural scenarios

Aerial application:

- Aerial applicators must wear long pants and a long-sleeved shirt.

- Mixers/loaders must wear long pants, a long-sleeved shirt and chemical-resistant gloves during mixing, loading, clean-up and repair activities.
- Aerial applicators using a closed cab are not required to wear chemical-resistant gloves.
- Aircraft must be closed cab.
- Mixer/loader and applicator must be different individuals.
- No human flaggers permitted.

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

DISPOSAL: Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank. Follow provincial instruction for any required additional cleaning of the container prior to its disposal. Make the empty container unsuitable for further use. 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.

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. Treat symptomatically.

SENSITIVE PLANTS: Vegetables, flowers, grapes, fruit trees and 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, vapourization may cause injury to susceptible plants growing nearby.

STORAGE: Store Wilson[®] Broadex MCPA Weed Killer Solution away from fertilizers, seeds, insecticides, fungicides or other herbicides intended for use on MCPA sensitive crops.

USE: When applying Wilson[®] Broadex MCPA Weed Killer Solution avoid contaminating irrigation ditches or domestic water supplies. Do not apply directly to water. Avoid using sprayers which contained MCPA to apply other pesticides to sensitive crops.

NOTE: Local conditions may affect the use of herbicides. Provincial agricultural authorities issue recommendations to fit local conditions. Be sure that use of this product conforms to all applicable regulations.

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

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