bromoxynil

ALWAYS READ AND FOLLOW THE LABEL

Information on this page is not to be substituted for label directions

Active Ingredient (a.i.):

bromoxynil

Target Pest Category:

herbicide



Examples of Trade Names:

Pardner, Hoe Grass II, Buctril M, Badge, Compass, Laser, Koril, Mextrol and Thumper

Types of Formulation:

Emulsifiable concentrate. Some products are formulated with other active ingredients.

Chemical Family:

Hydroxybenzonitrile

What it is:

Post-emergent herbicide for control of annual broadleaved weeds in small grains, corn and established alfalfa and seedling grasses for seed.

How it works (Mode of Action): Contact herbicide which inhibits photosynthesis and plant

respiration.

Toxicity based on pure active ingredient:

Species	LD ₅₀ /LC ₅₀	Relative Toxicity
Mammal (rat)	LD ₅₀ Oral : 190 mg/kg	Moderately Toxic
	LD ₅₀ Dermal: > 2000 mg/kg	Slightly Toxic
Bird (quail)	LD ₅₀ 100-125 mg/kg	Moderately Toxic
Bees (48 hours oral)	LD ₅₀ 4 µg/bee	Slightly Toxic
Fish (trout) (96 hour)	LC ₅₀ 0.5 mg/L	Highly Toxic

^{*}For description of relative toxicity categories please click here.

Weeds controlled:

Seedling to 4 leaf stage: smartweed, nightshade, velvetleaf, pigweed, common ragweed, cocklebur, stinkweed, and wild mustard.

Seedling to 8 leaf stage: wild, common and tartary buckwheats and lamb's-quarters. Most established perennial broadleaved weeds such as chickweed and grasses are tolerate to field applications of this herbicide.

It can be used in crops such as wheat, barley, oats, corn, fall rye, triticale, forage sorghum and millet, and certain seedling grasses. A wide range of tank-mix herbicide options extend the spectrum of control.

How long it takes/Expected Results:

Within a few hours to several days, depending on the weather, small areas of burned tissue will appear on the leaves of the weeds. Complete death of the weeds will be evident in 1-2 weeks.

Application Timing:

Activity is greater when weeds are growing rapidly. For best results, treat weeds at the **recommended** growth stages while young and actively growing. Apply in good growing conditions. Application must be made before the crop shields the weeds. Weed stage should be checked **prior** to spraying.



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Mixing Instructions:

 Mixing instructions vary depending on the tank-mix combinations, please refer to label for specific directions.

Application Tips:

- o Resistant to removal by rainfall.
- o Spray uniformity is very important.
- o Spray when weeds are seedlings.
- o Avoid spraying during severe drought or high temperatures (30°C).
- Spray early before the crop canopy restricts spray coverage of weeds.

Storage:

- Store in tightly closed original container. Do not ship or store near food, feed, seed and fertilizers.
- Keep away from fire, open flame, or other sources of heat.
- Certain formulations will solidify at
 -20°C but will be usable at above 0°C.
- Segregate insecticides/fungicides from herbicides to prevent contamination.

Applicator Safety and Re-entry:

- Avoid contact with skin, eyes and clothing.
- o Avoid breathing spray mist.
- Re-entry periods vary with tank-mix combinations; refer to the label for specific re-entry times.

Environmental Considerations:

- Bromoxynil is toxic to birds and fish, but not to bees.
- It has a low persistence in soil. In sandy soil, the half-life is about 10 days. Persistence of the compound is slightly longer in clay and peat field soils than in the sandy soils.
- Bromoxynil is broken down by some soil bacteria.
- Bromoxynil is not readily translocated throughout the plant once it has been absorbed.

Resistance Management:

- o Bromoxynil is a Group 6 herbicide.
- o Where possible, rotate the use of bromoxynil or other Group 6 herbicides with different herbicide groups that control the same weeds in a field.
- o Use tank mixtures with herbicides from a different group when such use is permitted.
- o Herbicide use should be based on an IPM program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage, cultural, biological and other chemical control practices.
- Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.

Integrated Pest Management:

o Bromoxynil is relatively non-toxic to bees. When properly applied bromoxynil has no effects on non-target organisms and leaves no residues in food.

Restrictions:

- o Do NOT use treated crops for grazing or green feed until 30 days after application.
- o Do NOT cut treated crops for forage until 30 days after application.
- o Product may contain petroleum distillates that are moderately to highly toxic to aquatic organisms. Avoid contamination of aquatic systems during application.

Pesticide Labels:

 To find labels for pesticides registered in Canada, please link to the Pest Management Regulatory Agency (PMRA) label search web page: http://www.eddenet.pmra-arla.gc.ca/4.0/4.01.asp

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