# WHEAT, BARLEY, OATS - HARD TO KILL WEEDS

### General Information

#### APPLICATION INSTRUCTIONS:

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.

Use Precautions for Aerial Application (to cereal crops)

- 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.

## **GENERAL PRECAUTIONS**

### RESISTANCE MANAGEMENT RECOMMENDATIONS:

For resistance management, IPCO MCPA K400 is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to IPCO MCPA K400 and other Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance: Where possible, rotate the use of IPCO MCPA K400 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 resistancemanagement and/or integrated weed-management recommendations for specific crops and weed biotypes. For further information or to report suspected resistance, contact Interprovincial Cooperative Ltd. at 1-204-233-3461.

## PRECAUTIONS:

- 1. KEEP OUT OF REACH OF CHILDREN. Do not use in residential areas, which are defined as sites where bystanders may be present during or after spraying, including homes, schools, parks, playgrounds, playing fields and public buildings.
- 2. 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.
- 4. Do not breathe spray mist or vapors.
- 5. Avoid spray or vapor drifts onto susceptible plants such as grapes, tomatoes, tobacco, sugar beets, sunflowers, beans, turnips, cauliflower, cabbage, alfalfa, clover, peas, potatoes, ornamental trees, shrubs or flowers, fruit trees, lawns, most vegetable crops or other desirable vegetation.
- 6. Do not spray when there is any danger of wind or on exceptionally hot days over 27°C.
- 7. Drift from spray may be reduced by using high volume sprays under low pressure, coarse sprays, and drop nozzles.
- 8. Do not contaminate any body of water. Avoid contamination of foods.
- 9. Do not use in a greenhouse.
- 10. Keep in original container during storage.

- 11. Do not store near or in same room as seeds, feeds, fertilizers or pesticides.
- 12. Clean spray equipment thoroughly after use. Do not use spray equipment for other purposes.

Do not re-use empty containers.

- 13. Do not enter treated areas within 12-hours after application.
- 14. Do not permit lactating dairy animals to graze fields within 7 days after application.
- 15. Do not harvest for forage or cut hay within 7 days after application.
- 16. Withdraw meat animals from treated fields at least 3 days before slaughter.
- 17. 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.

Limitations, Restrictions, and Exceptions

WHEAT, BARLEY, OATS

Treatment Stage:

For ground or aerial application. Treat when crop is in the 3 to 6 leaf stage.

## Method

Broadcast/Foliar Air

**Broadcast/Foliar Ground** 

Broadcast/Foliar Air

**Broadcast/Foliar Ground** 

Rates

field\_rates 0

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## Timings

When crop is in the 3 to 6 leaf stage.

When Hempnettle is in 2-4 leaf stage.