

Evaluation Report for Category B, Subcategory B.3.12 Application

Application Number: 2012-0438
Application: Change to product label; new site.
Product: Arsenal PowerLine Herbicide
Registration Number: 30203
Active ingredients (a.i.): Imazapyr, present as isopropylamine salt
PMRA Document Number: 2277853

Background

Arsenal PowerLine Herbicide is registered for application alone or in tank mixture with Banvel VM Herbicide (Registration Number 29249) or glyphosate for non-crop and non-graze areas for control of many annual and perennial grass and broadleaf weed species, and for control of some deciduous woody plants. Arsenal PowerLine Herbicide is also registered for application in low spray volumes (50-200 L/ha of a 1-1.5% solution) in combination with a non-ionic surfactant for brush control, specifically for aspen, fir, maple, poplar, and spruce.

Purpose of Application

The purpose of this application was to amend the label to include application by means of brushing on or as a spray for control to freshly cut stump surfaces of several woody brush/tree species to control re-growth.

Chemistry Assessment

A chemistry assessment was not required for this application.

Health Assessments

Arsenal PowerLine Herbicide for use on cut stumps to control regrowth was an addition to the use pattern for imazapyr. Since the application rate is higher and application equipment is different than previously registered uses, a quantitative risk assessment was conducted for mixers, loaders and applicators. No risks of concern were identified.

Environmental Assessment

No new environmental data were required to support the label amendments for Arsenal PowerLine Herbicide. The addition of use as a cut stump treatment and changes to the label are considered acceptable from an environmental perspective. The label is adequate from the point of view of environmental protection.

Value Assessment

An assessment of the submitted data generated in nine trials conducted (2008-2009) in Québec, Ontario, New Brunswick and Nova Scotia demonstrated that Arsenal PowerLine Herbicide applied as a 9.0% solution by means of brushing on or as a spray can be expected to control re-growth of cut stumps of alder, aspen, birch, cherry, dogwood, maple, oak, poplar, willow, and mountain ash.

The application of a 9.0% solution to cut stumps in the submitted studies typically resulted in a high level of control of re-growth of the several tested deciduous tree species. In addition, cut stump treatment has been registered in the U.S. since 2007 with a U.S. concentration range of 6.3% to 9.4%. The same concentration range was supported for the Canadian registration, which provides the same flexibility to applicators in Canada as in the U.S. (e.g., concentration selected based on diameter of stumps to be treated).

No efficacy data were submitted for ash (*Fraxinus* spp.). However, as data submitted for a range of broadleaf deciduous trees demonstrated that control of re-growth from cut stumps was usually achieved, and as the U.S. registration of Arsenal PowerLine Herbicide label includes a claim of control of re-growth of cut stumps of mixed hardwoods and lists ash as a controlled brush species, a claim of control of re-growth of cut stumps of ash was supported.

The recommendation to add a non-ionic surfactant at 0.25% v/v for improved uptake of the herbicide through partially callused cambiums was supported since this recommendation has been included on U.S. label since 2007. Additionally, the recommendation to add a non-ionic surfactant at this concentration is already included on the Canadian label for low volume foliar applications of Arsenal PowerLine Herbicide for brush control.

Application of Arsenal PowerLine Herbicide to cut stumps can be expected to be an effective tool for management of woody vegetation in non-crop areas, particularly rights-of-way, while using less herbicide than broadcast treatments and reducing exposure of non-target vegetation and areas.

Conclusion

The PMRA completed an evaluation for the application and found that the submitted information was sufficient to amend the registration of Arsenal PowerLine Herbicide to include application as a 6.3 to 9.4% solution by means of brushing on or as a spray for control of re-growth of cut stumps of alder, ash, aspen, birch, cherry, dogwood, maple, oak, poplar, willow, and mountain ash. A non-ionic surfactant added at 0.25% v/v may be added to improve uptake through partially callused cambiums.

References

- 2155344 2012, Trial Reports for Efficacy Evaluations of Arsenal PowerLine - Brush, DACO: 10.2.3.3

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