Health Canada Santé Canada

Evaluation Report for Category C, Subcategory 6.3 (URMULE) Application

Application Number: 2010-1778
Application: Catgeory C, Subcategory 6.3 (URMULE)
Product: Dual II Magnum Herbicide
Registration Number: 25729
Active ingredients (a.i.): S-Metolachlor and R-Enantiomer
PMRA Document Number English PDF: 1888379

Background

Dual Magnum Herbicide has been registered since November 12, 1998. Dual II Magnum Herbicide is registered for the control/suppression of annual grasses and broadleaf weeds in a variety of terrestrial food and feed crops, specific conifers and specific ornamentals. For specific details of uses, application rates and methods, precautions, restriction, and personal protective equipment requirements, refer to the product label.

Purpose of Application

The purpose of this application was to amend the registration of Dual II Magnum Herbicide to include the claim of control of labelled annual grasses and weeds on highbush blueberry. The product is intended for a single ground application at a rate of 1.25 to 1.75 L/ha in 150-300L/ha of water, with a minimum pre-harvest interval of 30 days.

Chemistry Assessment

A chemistry assessment was not required as there was no change to product chemistry.

Health Assessments

A toxicology assessment was not required since there was no change to the formulation.

Health Assessment

The proposed use of Dual Magnum Herbicide and Dual II Magnum Herbicide Herbicides on highbush blueberries should not result in an increase in occupational exposure over the registered uses of s-metolachlor since the application rate, number of applications, frequency of application and method of application falls within that registered for other labelled crops.

To support the use expansion to highbush blueberries, residue data from supervised residue trials conducted in the US and Canada were reviewed, in which highbush blueberries were treated with *S*-metolachlor and harvested according to label directions.

Canada

Maximum Residue Limit

The recommendation for a maximum residue limit (MRL) for *S*-metolachlor on Crop subgroup 13-07B commodities was based on guidance provided in PRO2005-04 ("Guidance for Setting Pesticide Maximum Residue Limits Based on Field Trial Data"). Based on the residue data, a MRL to cover residues of *S*-metolachlor in/on Crop subgroup 13-07B commodities will be established as shown in Table 1.

Table 1. **Summary of Field Trial Data Used to Establish Maximum Residue Limits (MRLs) for Highbush Blueberries.**

Commodity	**Application Method/ Total Application Rate (kg a.i./ha)**	**PHI (days)**	***S*-metolachlor Residues (ppm) Min\Max**		**Currently Established MRL (ppm)**	**Recommended MRL (ppm)**
Highbush Blueberries	Ground application/ 1.41-1.54	27-33	<0.080	<0.08	None	0.08 for highbush blueberries, lowbush blueberries, currants, elderberries, gooseberries, huckleberries, Aronia berries, Buffalo currants, Chilean guava, European barberries, highbush cranberries, honeysuckle, jostaberries, Saskatoon berries (juneberries), lingon berries, native currants, salal berries, and sea buckthorn

The proposed use of Dual Magnum Herbicide and Dual II Magnum Herbicide Herbicides on highbush blueberries should not result in an increase in occupational exposure over the registered uses of s-metolachlor since the application rate, number of applications, frequency of application and method of application falls within that registered for other labelled crops.

Environmental Assessment

The proposed minor use expansion on highbush blueberry will not result in an increase in risk to the environment.

Value Assessment

Reports from 8 field trials conducted over 4 years in Ontario, Quebec, North Carolina, and Oregon were submitted for review. Data for phytotoxicity, plant height and yield indicated that there is an adequate margin of crop safety for new and established highbush blueberry in which a single application of 1144-1600 g a.i./ha s-metolachlor is applied as a directed spray in a manner that avoids contact with the trunk and foliage.

Conclusion

The PMRA has completed an evaluation of the subject application and has found the information sufficient to amend the registration of Dual II Magnum Herbicide to include the claim of control of labelled annual grasses and broadleaf weeds on highbush blueberry.

MRLs

Following the review of all available data, it was determined that a MRL of 0.08 ppm for residues of *S*-metolachlor in/on highbush blueberries, lowbush blueberries, currants, elderberries, gooseberries, huckleberries, Aronia berries, Buffalo currants, Chilean guava, European barberries, highbush cranberries, honeysuckle, jostaberries, Saskatoon berries (juneberries), lingon berries, native currants, salal berries, and sea buckthorn is considered adequate to cover residues of *S*-metolachlor in/on these commodities as a result of this new use. Residues of *S*-metolachlor in Crop subgroup 13-07B commodities at the established MRL will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

References

Value Assessment

1730410 2009, Value Report for s-metolachlor on highbush blueberry, DACO: 10.1

1730412 2009, Tolerance Data Reports, DACO: 10.3.2

1730416 1993 . "*S*-Metolachlor: Magnitude of the Residue on Blueberry." IR-4 Project Number B2616, DACO 7.4.1.

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