Health Canada Santé Canada

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

Application Number: 2011-1531
Application: **Category C, subcategory 6.3 (URMULE)**
Product: Chateau Herbicide WDG
Registration Number: 29231
Active ingredient (a.i.): Flumioxazin (51.1%)
PMRA Document Number English PDF: 2147984

Background

Chateau Herbicide WDG has been registered since (March 12, 2009). Chateau Herbicide WDG is registered for the control of preemergence weeds in dry bulb onion, potato, pome fruit (apple and pear), grape, strawberry, highbush blueberry, stone fruit (peach, cherry, nectarine, plum, and apricot), asparagus, field pepper and to maintain bare ground non-crop areas, including bare ground non-crop areas of farms. For specific details of uses, application rates and methods, precautions, restrictions, and personal protective equipment requirements, refer to product label.

Purpose of Application

The purpose of this application was to amend the registration of Chateau Herbicide WDG to include the claim of control of labelled weeds in lowbush blueberries, in addition to a claim of supression for hair-cap moss. For control of labelled weeds, the product is intended for application at a rate of 140 g product/ha for coarse textured soils with <5% organic matter or 210 g product/ha for medium textured soils with <5% organic matter. For suppression of moss, the product can be applied at 280 g product/ha for coarse textured soils with <5% organic matter or 420 g product/ha for medium textured soils with <5% organic matter. For both control of labelled weeds and suppression of moss, there are a maximum of 2 applications per year. The applications are made at the dormant growth stage of blueberry, pre-emergent to weeds with the exception of moss.

Chemistry Assessment

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

Health Assessment

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

Canada

The use on lowbush blueberry should not result in unacceptable risk for occupational or bystander exposure over registered uses of flumioxazin. Amount product handled per day statements already on the registered label and the fact that applications are made to dormant crops ensure that chemical handlers and post-application workers are not exposed to unacceptable risk.

To support the use expansion to lowbush blueberries, residue data from supervised residue trials conducted in the US were assessed, in which blueberries were treated with flumioxazin at exaggerated rates and harvested at shorter PHIs than proposed.

Maximum Residue Limit

Based on the maximum residue observed in crops treated according to the current label directions and harvested at the appropriate PHI, it was determined that an MRL of 0.02 ppm to cover residues of flumioxazin in/on lowbush blueberries will be recommended as a result of this new use.

Environmental Assessment

Since the proposed use pattern for lowbush blueberries falls within the registered use pattern (application rate, interval between application, method of application), no increase in environmental risk is expected.

Value Assessment

Value data consisting of replicated field trial data from 4 trials in NS and NB from 2006-2009 was provided to demonstrate a suppression claim for hair-cap moss when Chateau Herbicide WDG is applied at 280 g product/ha (143 g a.i./ha) on coarse textured soils and 420 g product/ha (214 g a.i./ha) on medium textured soils.

The data provided were sufficient to demonstrate suppression of hair-cap moss when Chateau Herbicide WDG is applied at a rate of 280 g product/ha (143 g a.i./ha) on coarse textured soils and 420 g product/ha (214 g a.i./ha) on medium textured soils

A rationale was provided by the sponsor to demonstrate that the efficacy of Chateau Herbicide WDG applied at a rate of 140 g product/ha (71 g a.i./ha) on coarse textured soils with <5% organic matter or 210 g product/ha (107 g a.i./ha) on medium textured soils with <5% organic matter for control of redroot pigweed, green pigweed, common ragweed, common lamb's-quarters, green foxtail, hairy nightshade, dandelion and eastern black nightshade would be expected to be similar in lowbush blueberry as it is to other labelled crops on the Chateau Herbicide WDG label.

In addition, crop tolerance data were provided to demonstrate the tolerance of lowbush blueberry to an application of Chateau Herbicide WDG applied at the 1x and 2x rates in the same four trials. The data are sufficient to demonstrate crop tolerance of lowbush blueberry to a maximum of two applications per year of Chateau Herbicide WDG applied at 280 g product/ha (143 g a.i./ha) on coarse textured soils and 420 g product/ha (214 g a.i./ha) on medium textured soils in the sprout year.

In six field trials, the tolerance of field pepper to a single broadcast application of Chateau Herbicide WDG applied prior to transplanting at 107 g a.i./ha and 215 g a.i./ha was assessed as percent injury relative to an untreated check. While significant injury to field peppers was observed in some trials under broadcast application, the labelled use directions, which call for hooded or shielded and directed pre-transplant application to row middles are expected to mitigate risk to transplanted field pepper.

Conclusions

The PMRA has completed an evaluation of the subject application and has found the information sufficient to amend the registration of Chateau Herbicide WDG to include the claim of control of labelled weeds in lowbush blueberries and field peppers, suppression of hair-cap moss in lowbush blueberries and suppression of green foxtail in field peppers.

MRLs

Following the review of all available data, it was determined that the MRL of 0.02 ppm in/on lowbush blueberries is considered adequate to cover residues of flumioxazin in/on this commodity as a result of this new use. Residues of flumioxazin in this crop at the established MRL will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Reference List

PMRA #	Reference
1500898	2006, Flumioxazin: Magnitude of the Residue on Blueberry, DACO: 7.4.1
1903039	2010, Value Report - Chateau Herbicide WDG on lowbush blueberry, DACO: 10.1
1903044	References cited - Chateau Herbicide WDG on lowbush blueberry, DACO: 10.6
1903043	2009, Field trial reports - Chateau Herbicide WDG on lowbush blueberry, DACO: 10.3.2

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