



Evaluation Report for Category C, Subcategory 3.10 Application

Application Number: 2007-0203
Application: Category C, Subcategory 3.10
Product: Liberty 200SN Herbicide
Registration Number: 25337
Active ingredients (a.i.): glufosinate ammonium at 200 g/L
PMRA Document Number 1609751

Background

Liberty 200SN is a post-emergence herbicide that is registered for use on a number of crops including glufosinate ammonium tolerant (LibertyLink) field corn in Canada for the control of a broad spectrum of grassy and broadleaf weeds. As an alone treatment, Liberty 200SN may be applied to glufosinate ammonium tolerant field corn (1-8 leaf stage of growth or 5-6 visible collars) at an application rate of 1.5, 2.0 or 2.5 L/ha (300, 400 or 500 g a.i./ha, respectively). The application rate is based on weed sensitivity to the product and growth stage at the time of application. Liberty 200SN may be applied a second time to fields treated with up to 500 g a.i./ha if new weed germination or growth is present. The label restricts the total application per season to a maximum of 4.5 L/ha (900 g a.i./ha).

Distinct herbicide contains a coformulation of dicamba (present as sodium salt) at a concentration of 50% plus diflufenzopyr (present as sodium salt) at a concentration of 20%. Distinct is a selective post-emergence herbicide for use in field corn to control annual broadleaf weeds in eastern Canada. As an alone treatment, Distinct may be applied at 285 g/ha (199.5 g a.i./ha) with or without the addition of a non-ionic surfactant and liquid nitrogen fertilizer. With the additives, Distinct may be applied to field corn at the 2-6 leaf stage of growth and when the broadleaf weeds are less than 5 cm tall.

Purpose of Application

The purpose of this application was to amend the registration of Liberty 200SN Herbicide to add a tank mix with Distinct Herbicide for post-emergence use on glufosinate ammonium tolerant field corn (LibertyLink) for enhanced control of labelled annual broadleaf weeds. Both tank mix partners are applied at the registered application rate and timing of application to the crop and weeds.

Chemistry Assessment

A chemistry assessment was not required since the only change to the use pattern was to add Distinct herbicide as a tank mix partner.

Health Assessments

Health assessments were not required since the only change to the use pattern was to add Distinct herbicide as a tank mix partner.

Environmental Assessment

An environmental assessment was not required since the only change to the use pattern was to add Distinct herbicide as a tank mix partner.

Value Assessment

Crop tolerance and efficacy data from twenty (20) small-plot field trials conducted in Ontario (12 sites) and Quebec (1 site) over 4 years (1998, 1999, 2001 and 2006) were submitted to confirm that a tank mix of Liberty 200SH herbicide plus Distinct herbicide was safe for use on glufosinate ammonium tolerant field corn and the performance claim of enhanced control of labelled annual broadleaf weeds was supported. Crop tolerance was assessed as a visual rating of percent crop injury in 12 efficacy trials and 8 dedicated crop tolerance trials. Visible symptoms were assessed generally up to three times during the growing season as follows: EARLY-season (less than (<) 25 days after treatment, or DAT), MID-season (26-44 DAT) and LATE-season (greater than (>) 45 DAT). Grain yield was reported in 11 trials (6 weedy check plots and 5 weed-free check plots).

Efficacy data was assessed as a visual rating of percent weed control on a weed-specific basis. Visual control ratings were assessed generally up to three times during the growing season as follows: EARLY-season (< 18 DAT), MID-season (19-40 DAT) and LATE-season (> 41 DAT).

Based on the evidence provided, the registration of the Liberty 200SN + Distinct herbicide tank mix for use on glufosinate ammonium tolerant field corn (LibertyLink) was supported from a value perspective.

Conclusion

The PMRA has completed an evaluation of the subject application and concluded that the information supported the application to amend the registration of Liberty 200SN Herbicide to add a tank mix with Distinct Herbicide for post-emergence use on glufosinate ammonium tolerant field corn (LibertyLink).

References

A. LIST OF STUDIES/INFORMATION SUBMITTED BY THE REGISTRANT

VALUE

PMRA # 1359151 2006, LIBERTY 200 SN Herbicide - Data to Support a Tank-mix with Distinct Herbicide on Corn, DACO: 10.1,10.2.3.1,10.2.3.3(B),10.3.1,10.3.2(A). 357pp

ISSN: 1911-8082

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