

Evaluation Report for Category B, Subcategory B.3.1 Application

Application Number: 2008-2422
Application: B.3.1 (Changes to Product label – Application rate increase)
Product: Liberty 150 SN Herbicide and Crop Desiccant
Registration Number: 26694
Active ingredients (a.i.): Glufosinate ammonium (GLG)
PMRA Document Number : 1768051

Purpose of Application

The purpose of this application is to increase the application rate of the end-use product Liberty 150 SC Herbicide and Crop Desiccant MP (Reg. No. 24081) and of two master copy products, Liberty 150 SN Herbicide and Crop Desiccant (Reg. No. 26694) and Liberty 150 SN Herbicide (Reg. No. 28837), on glufosinate ammonium tolerant canola varieties to control perennial weeds.

Chemistry Assessment

A chemistry assessment was not required for this application.

Health Assessments

A formulant in this product is scheduled for removal by the end of 2008. The toxicity profile is not expected to be significantly different and no toxicity data are required for this change.

The proposed amendment to the Liberty 150 SN Herbicide & Crop Desiccant label should not result in an increase in occupational exposure to glufosinate ammonium over the currently registered use pattern. No unacceptable risk is expected when workers follow the label directions and wear the personal protective equipment identified on the label.

To support the rate increase on glufosinate ammonium tolerant canola varieties on the Liberty 150 SN Herbicide and Crop Desiccant label, no new residue data were submitted. Previously reviewed data from field trials conducted in/on canola were instead reassessed in the framework of this petition. Based on the residue data generated at rates up to 2000 g a.i./ha, no significant increase in the magnitude of the glufosinate ammonium and metabolite residues in/on glufosinate ammonium tolerant canola is expected. Accordingly, no increase in dietary exposure is anticipated.

Environmental Assessment

No new environmental data were submitted to support the increased rate of application of Liberty 150 SN Herbicide and Crop Desiccant. An environmental assessment was not required because the exposure environmental concentrations calculated for the new use pattern are lower than those calculated for the currently registered rate. Therefore, the use of this end-use product is not expected to increase environmental exposure to glufosinate ammonium as compared to the registered use and no increase in environmental risk is anticipated. Environmental concerns are mitigated on the existing label.

Value Assessment

Scientific rationales were submitted under submission number 2008-2421 to support the increase in the maximum rate of the first application from 500 g a.i./ha to 600 g a.i./ha for the two applications on the Liberty 150 SN and Crop Desiccant MP label. The rationales are also considered to be applicable to Liberty 150 SN Herbicide and Crop Desiccant.

Efficacy: The registered rates for a single application are 200, 300, 400, 500, and 600 g a.i./ha, which are dependent upon weed spectrum, weed growth stage, and/or level of control desired. The rate of 600 g a.i./ha is intended for improved top growth control of Canada thistle and season long control of heavy quackgrass populations. Therefore, application of 600 g a.i./ha as a first of two applications (with the second application remaining at 500 g a.i./ha) can be supported from an efficacy standpoint.

Crop Tolerance: Average yield of glufosinate ammonium tolerant canola treated with a single application of Liberty 150 SN Herbicide and Crop Desiccant MP at 400, 750 and 1500 g a.i./ha were 123%, 122% and 123% that of the weed-free control treatment (Submission number 1998-0863; PMRA # 1641364). It is, therefore, reasonable to conclude that these data support the two application scenario at the maximum seasonal rate of 1100 g a.i./ha from a crop tolerance perspective.

Conclusion

The PMRA has assessed all of the submitted information and is able to support the proposed label amendments.

References

PMRA 1611182: Rationale for a waiver from provision of additional efficacy and non-safety adverse effects data. Bayer CropScience Inc. DACO 10.2.3.1, 10.2.3.3, 10.3.1, and 10.3.2. June 19, 2008. pp. 3.

PMRA 1641364: Liberty Herbicide (24081): Third application in glufosinate tolerant canola. Submission under 98-0863. DACO 10. PMRA. pp. 3.

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