

Evaluation Report for Category B, Subcategory 3.4, 3.5 and 3.10 Application

Application Number: 2010-1415
Application: Changes to product label – Tank mixes, application method and rotational crops/plant back interval.
Product: Integrity
Registration Number: 29371
Active ingredients (a.i.): Saflufenacil & Dimethenamid-P
PMRA Document Number English PDF: 2051186

Background

The commercial end-use product Integrity (Registration number 29371) is currently registered for use in field and sweet corn as a pre-plant incorporated or pre-emergent treatment at a maximum rate of 1.1 litres of product per hectare (75 g saflufenacil + 660 g dimethenamid-P). It can be applied alone or in a tank mix with atrazine.

Purpose of Application

The purpose of this application is to amend the label of the commercial end-use product Integrity to include a pre-plant surface application tank mixed with glyphosate herbicide (900 g a.e./ha) and to amend the labelled “Rotational Guidelines” section.

Chemistry Assessment

A chemistry assessment was not required for this application.

Health Assessments

A toxicology assessment was not required for this application.

The use of Integrity herbicide as a pre-plant surface application to field and sweet corn, when tank mixed with glyphosate, is considered acceptable when workers follow label directions and precautions, including listed personal protective equipment.

No new residue data were submitted in support of this application. Saflufenacil and dimethenamid-P are currently registered, in a tank-mix combination with glyphosate, for use on corn in Canada with pre-plant applications at higher rates. The modification to the crop rotation restriction is not expected to result in a change in the magnitude of residues. Thus, no increase in dietary exposure to the three active ingredients is anticipated. Residues of saflufenacil and metabolites M800H11 and M800H35, dimethenamid, and glyphosate and metabolite AMPA in field corn and sweet corn kernels plus cob with husks removed, at the established MRLs, will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

A pre-plant surface application of Integrity at the currently registered rate will not pose an additional environmental risk when compared to the currently registered application methods. While the timing of pre-plant surface and pre-emergent applications is slightly different, these are both carried out on a bare (non-cropped) field and thus represent the same potential for exposure to non-target organisms. In addition, a tank mix with glyphosate at 900 g a.e./ha is common for bare field uses of similar products, and therefore, does not pose additional concern.

Value Assessment

Efficacy of the pre-plant surface application of Integrity plus glyphosate herbicide tank mix was visually assessed in 10 research trials for 25 weed species. It was demonstrated that the pre-plant surface application of Integrity plus glyphosate herbicide tank mix provided acceptable burndown and residual control of the labelled weeds.

Injury to field corn with the pre-plant surface application of Integrity plus glyphosate herbicide tank mix at either 1 x rate or exaggerated 2 x rate was not observed in 10 trials over eight varieties. Yield data from eight trials further supported crop tolerance claim of field corn to pre-plant surface treatment of Integrity plus glyphosate herbicide tank mix.

Use of the pre-plant surface application of Integrity plus glyphosate herbicide tank mix in sweet corn was also supported.

A rationale in lieu of data was submitted to support the amendment to the labelled “Recropping Guidelines”. The rationale was reviewed and considered to be acceptable.

Conclusion

The PMRA has completed an assessment of available information for Integrity and has found the information sufficient to support the amendments to the label to include a tank mix with glyphosate herbicide as well as to remove the recropping statements regarding muck soils.

References

1890598 2010, Application to register Integrity pre-plant in corn.
DACO 10.1, 10.2, and 10.3

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