

Evaluation Report for Category B, Subcategory 3.10, 3.11, 3.12 Application

Application Number: 2010-6339
Application: New Tank Mix, New Pest, and New Site.
Product: Integrity
Registration Number: 29371
Active ingredients (a.i.): Dimethenamid-P [DMN]
Saflufenacil [SFF]
PMRA Document Number English PDF: 2147970

Background

Integrity (Registration number 29371 containing 68 g saflufenacil and 600g Dimethenamid-P per litre of product) is currently registered for use in field and sweet corn as a pre-plant incorporated or pre-emergent treatment for season-long control of weeds.

Other products containing saflufenacil and Dimethenamid-P are already registered for applications on soybeans. Eragon (Registration number 29372, containing saflufenacil), is applied pre-plant at 25 g of saflufenacil per hectare alone or in a tank mix with glyphosate products and Merge adjuvant. Frontier Max (Registration number 29194, containing Dimethenamid-P) is applied pre-plant incorporated or pre-emergence at 619 - 693 g Dimethenamid-P per hectare; the application rate is dependant on the weeds to be controlled and soil texture. Frontier Max may be applied with tank mix partners, including glyphosate products and Merge adjuvant.

Purpose of Application

The purpose of the application was for the addition of a pre-plant surface application on soybean to the Integrity label in a tank mix with glyphosate products and Merge adjuvant for the burndown control of Canada fleabane, common ragweed, lamb's quarters, redroot pigweed, wild mustard, dandelion (suppression only), and the early season residual suppression of barnyard grass, large crabgrass and yellow and green foxtail.

Chemistry Assessment

A Chemistry Assessment was not required for this application.

Health Assessments

A toxicology assessment was not required for this application.

The addition of a pre-plant surface application to a new crop (soybeans) and a tank mix with glyphosate products and Merge adjuvant to the label of Integrity should not result in unacceptable risk when workers follow all use directions and precautions and wear personal protective equipment as recommended on the label.

No new residue data are required to support the addition of soybeans to the label of the registered product Integrity containing saflufenacil and Dimethenamid-P since both active ingredients are currently registered for use on soybeans in Canada with equal or higher application rates. Since there is no change proposed to the registered uses of saflufenacil and Dimethenamid-P on soybeans, adding soybeans to the registered label of Integrity is not expected to increase the magnitude of saflufenacil and Dimethenamid-P residues in/on soybeans. Therefore, the dietary exposure is not expected to increase and will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

The application rate for Integrity on soybean is lower than the current rate for Integrity on corn and within rates for other registered products containing saflufenacil or Dimethenamid-P. In addition, other products containing saflufenacil and Dimethenamid-P are already registered for applications in tank mixes with glyphosate products and Merge adjuvant for use on bare fields. Therefore, no additional environmental risk is expected from this new use of Integrity. Buffer zones up to four metres must be followed when applying this product on soybean.

Value Assessment

To support the application, the applicant provided reports from thirty-three (33) efficacy field trials conducted in Ontario (32 trials) and Québec (one trial) in 2009 (nine trials) and 2010 (24 trials). Integrity, at a rate of 25 g of saflufenacil and 220 g of Dimethenamid-P per hectare, was tested in tank-mix combination with glyphosate at 900 g per hectare and Merge at 1 L per hectare. This tank-mix was applied as a surface application prior to planting soybeans. Weed control results were provided for redroot pigweed, common ragweed, shepherd's purse, wild buckwheat, lamb's quarters, Canada fleabane, common chickweed, dandelion, large crabgrass, barnyard grass and green foxtail.

The applicant also provided four dedicated weed free crop tolerance trials that were conducted in Ontario in 2010 to examine the potential adverse effects of Integrity in tank-mix with glyphosate products on soybeans. In addition, non-safety adverse effects data were also collected from the efficacy trials provided for review. Yield of soybean was reported in the four dedicated crop tolerance trials and in 19 efficacy trials.

The addition of a pre-plant surface application on soybeans of Integrity at a rate of 25 g of saflufenacil and 220 g of Dimethenamid-P per hectare in tank-mix combination with 900 g of glyphosate per hectare and Merger adjuvant (1 L per hectare) to the Integrity label for use in Eastern Canada for the burndown control of Canada fleabane, common ragweed, lamb's quarters, redroot pigweed, wild mustard, dandelion (suppression only), and the early season suppression of barnyard grass, large crabgrass, green foxtail and yellow foxtail was determined to be acceptable from a value perspective.

Conclusion

The addition of a pre-plant surface application on soybean to the Integrity label in a tank mix with glyphosate products and Merge adjuvant for the burndown control of Canada fleabane, common ragweed, lamb's quarters, redroot pigweed, wild mustard, dandelion (suppression only), and the early season residual suppression of barnyard grass, large crabgrass and yellow and green foxtail has been approved.

References

PMRA

Document

Number

Reference

- | | |
|---------|---|
| 2000025 | 2010, INTEGRITY on Soybeans (Active Ingredient: Saflufenacil and Dimethenamid-P), Application to Register INTEGRITY Herbicide on Soybeans, DACO:
10.1,10.2,10.2.1,10.2.2,10.2.3,10.2.3.1,10.2.3.3(B),10.3,10.3.1,10.3.2,10.4,10.5,10.5.2,10.5.3,10.6 |
| 2000026 | 2010, Efficacy Summary Tables Supporting the Addition of Soybeans, DACO:
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| 2000027 | 2010, Phytotoxicity and Yield Summary Tables Supporting the Addition of Soybeans, DACO: 10.3.1 |

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