Health Canada Santé Canada

Evaluation Report for Category B Subcategory 2.1, 2.3, 2.4, 2.6, 3.10 Application

Application Number: 2014-1377
Application: B.2.1 - New Guarantee
B.2.3 - New Identity of Formulants
B.2.4 - New Proportion of Formulants
B.2.6 - New combination of TGAI's
B.3.10 - New Tank Mixes
Product: Foxfire Herbicide
Registration Number: 31911
Active ingredients (a.i.): Fenoxaprop-P-Ethyl + Pinoxaden
PMRA Document Number : 2546092

Purpose of Application

The purpose of this application was to register the end use product, Foxfire Herbicide, for post emergence control of wild oats, green foxtail, yellow foxtail, and barnyard grass in spring wheat in the Prairie Provinces and Peace River, Okanagan, and Creston Flats regions of British Columbia. Foxfire Herbicide is a new combination of two active ingredients, 50 g/L pinoxaden and 50 g/L fenoxaprop-P-ethyl, in a single product (with 25 g/L cloquintocet-mexyl as a safener).

Chemistry Assessment

Foxfire Herbicide is formulated as an emulsifiable concentrate containing pinoxaden and fenoxaprop-p-ethyl, both actives at a nominal concentration of 50 g/L. This end-use product has a density of 0.997 g/mL and pH of 5.1. The chemistry requirements for this product have been fulfilled.

Health Assessments

Foxfire Herbicide was of low acute oral, dermal and inhalation toxicity in rats. In rabbits, it was mildly irritating to the eye and severely irritating to the skin. It was found to be a dermal sensitizer in guinea pigs.

The use of the end-use product Foxfire Herbicide on spring wheat to control grassy weeds is not expected to result in potential occupational or bystander exposure over the exposure from the registered uses of the active ingredients pinoxaden and fenoxaprop-p-ethyl. For the herbicide safener, cloquintocet-mexyl, the application rate is higher than the currently registered use pattern, and as such, the potential occupational or bystander exposure was assessed. However, the risk assessments on file are sufficiently conservative to cover the potential exposure. Therefore, updated quantitative risk assessments are not required.

No health risks of concern are expected from the use of the product Foxfire Herbicide provided that workers wear the appropriate personal protective equipment and follow

all label directions.

No new residue data were submitted in support of the registration of the end-use product, Foxfire Herbicide, which contains pinoxaden and fenoxaprop-p-ethyl, for use on spring wheat. The use pattern of the end-use product was determined to be within that of the registered rates for the active ingredients. Therefore, the previously reviewed data was reassessed in the framework of the current application and confirmed that the use of Foxfire Herbicide is not expected to result in an increase in the magnitude of pinoxaden and fenoxaprop-p-ethyl residues in/on the spring wheat. Therefore, the use of Foxfire Herbicide will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

The application rates for Foxfire Herbicide are within the registered rates for the active ingredients. The use of Foxfire Herbicide is not expected to result in an increase in the expected environmental concentrations (EECs) of pinoxaden, fenoxaprop-p-ethyl and cloquintocet-mexyl. Hence, the use of Foxfire Herbicide will not pose an unacceptable risk to the environment.

Value Assessment

Value information included data from 10 combined efficacy and crop tolerance trials conducted in the Prairie Provinces in 2013. Efficacy and crop safety of Foxfire Herbicide applied alone or in a tank mixture with one of the following broadleaf herbicides, Buctril M, Frontline XL, Infinity, Pulsar, and Stellar A + Stellar B, were assessed and compared to various positive control treatments in these trials.

Data from the field trials demonstrated that Foxfire Herbicide applied at the 1 x rate provided acceptable control of green foxtail, yellow foxtail, and wild oats. Therefore, claims of these weed control are supported for labelling.

Given that (1) the efficacy of Foxfire Herbicide applied at the 1 x rate was comparable to that of Axial BIA and Puma Advance each applied at their respective label rates and (2) barnyard grass control is registered on both Axial BIA and Puma Advance labels, a claim of barnyard grass control is supported for labelling.

Given that (1) control of grassy weeds provided by Foxfire Herbicide was not compromised when it was applied in combination with one of the following herbicides, Buctril M, Frontline XL, Infinity, Pulsar, and Stellar A + Stellar B and (2) all active ingredients included in these herbicides, including bromoxynil, MCPA, florasulam, pyrosulfotole, dicamba, and fluroxypyr, are registered in tank mixtures with both pinoxaden and fenoxaprop-P-ethyl, a reduction of broadleaf control provided by these herbicides is not anticipated when they are applied in combination with FoxFire. Therefore, these herbicides are supported for labelling as tank mix partners.

Crop injury was reported for four spring wheat varieties for the same herbicide treatments in the same trials. Injury to spring wheat was either minor or not detectable. Spring wheat can be expected to exhibit an adequate margin of crop safety to Foxfire Herbicide when applied in

accordance with the label instructions.

The rotational crop restriction for Foxfire Herbicide was supported based on the registered rotational crop restriction for Axial BIA.

Based on the weight of evidence, the registration of Foxfire Herbicide for control of grasses in spring wheat is supported from a value perspective.

Conclusion

PMRA has reviewed information provided in support of the registration of Foxfire Herbicide. Based on this review, Foxfire Herbicide is acceptable for full registration.

References

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