

Evaluation Report for Category B, Subcategory 3.2, 3.13 Application

Application Number: 2021-5302
Application: Changes to End-Use Product Labels – Application Timing, Precautions
Product: AUTHORITY SUPREME Herbicide
Registration Number: 32562
Active ingredients (a.i.): Pyroxasulfone and Sulfentrazone
PMRA Document Number : 3425756

Purpose of Application

The purpose of this application was to amend the label of AUTHORITY SUPREME Herbicide, to add a fall application timing for the control of labelled weeds prior to planting field peas, chickpeas, and soybeans in the following spring in Western Canada.

Chemistry Assessment

A chemistry assessment was not required for this application.

Health Assessments

A toxicological assessment was not required for this application.

The addition of a fall timing of application to field peas, chickpeas and soybeans on the label of AUTHORITY SUPREME Herbicide represents an expansion of the use pattern for the active ingredients sulfentrazone and pyroxasulfone. However, updated quantitative risk assessments for mixers, loaders and applicators were not required since the most recent risk assessments on file were conducted with input parameters applicable to the exposure scenario. Postapplication worker exposure and bystander exposure are expected to be negligible due to the application timing and method (i.e., a pre-plant or preemergent to crops). Therefore, no health risks of concern were identified and the use can be supported from an occupational exposure perspective provided that label amendments are made, workers wear the appropriate personal protective equipment and follow all label directions.

No new residue data for sulfentrazone or pyroxasulfone were submitted or are required to support fall application of AUTHORITY SUPREME Herbicide in Western Canada prior to planting field peas, chickpeas and soybeans in the following spring.

Application of AUTHORITY SUPREME Herbicide will be made to the soil or stubble in the fall following crop harvest. As such, the residue data on file for sulfentrazone and pyroxasulfone to support application in the spring prior to planting or crop emergence can be extrapolated to support a fall application with planting of the crops the following spring.

Based on this assessment, residues are not expected to be greater than that for the currently registered uses and will be covered by the established MRLs. Consequently, dietary exposure to residues of sulfentrazone and pyroxasulfone is not expected to increase and will not pose health risks of concern to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

After a scientific review of the available information, the PMRA has concluded that the environmental risks associated with a fall application of AUTHORITY SUPREME Herbicide to chickpeas, field peas, and soybeans are acceptable when the product is used according to the label directions.

Value Assessment

The addition of a fall application timing on the AUTHORITY SUPREME Herbicide label for the control of labelled weeds in chickpeas, field peas, and soybeans in Western Canada helps to ensure herbicide activation in the early spring and offset the risk of late activation in years with little moisture. It also provides growers with more flexibility to apply this product for pre-plant weed control.

Value information submitted for review included data from replicated field trials conducted in Western Canada between 2019 and 2020. The information collectively demonstrated that the efficacy of a fall application of AUTHORITY SUPREME Herbicide for the control of labelled weeds the following spring was comparable or greater than that of a spring application. Host and rotational crop tolerance is not of concern since there is no change to the application rate and timing, i.e., pre-plant application.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information sufficient to support the amendment of AUTHORITY SUPREME Herbicide.

References

PMRA Document Number

Reference

3273855 2021, Value summary - Fall application of Authority Supreme Herbicide, DACO: 10.1, 10.2.1, 10.2.2, 10.3.2, 10.3.3, 10.4, 10.5.1, 10.5.2, 10.5.3, 10.5.4, and 10.5.5.

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