

Evaluation Report for Category B, Subcategory 3.1, 3.2, 3.13 Application

Application Number: 2021-5301
Application: Changes to End-Use Product Labels – Application Rate and Timing, Precautions
Product: AUTHORITY 480 Herbicide
Registration Number: 29012
Active ingredient (a.i.): Sulfentrazone
PMRA Document Number : 3425635

Purpose of Application

The purpose of this application was to amend the label of AUTHORITY 480 Herbicide, to add a fall application timing for the control of labelled weeds prior to planting chickpeas, fababeans, field peas, flax, mustard, soybeans, sunflowers, wheat (spring and durum) in the following spring in Western Canada. In addition, a modification was made to the use restrictions related to organic matter (OM) content on fine- and medium-textured soils.

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 chickpeas, fababeans, field peas, flax, mustard, soybeans, sunflowers, and wheat (spring and durum) on the label of AUTHORITY 480 Herbicide represents an expansion of the use pattern for the active ingredient sulfentrazone. However, an updated quantitative risk assessment for mixers, loaders and applicators was not required since the most recent risk assessment on file was 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 were submitted or are required to support fall application of AUTHORITY 480 Herbicide in Western Canada prior to planting chickpeas, fababeans, field peas, flax, mustard, soybeans, sunflowers and wheat (spring and durum) in the following spring.

Application of AUTHORITY 480 Herbicide will be made to the soil or

stubble in the fall following crop harvest. As such, the residue data on file for sulfentrazone 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 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 480 Herbicide to chickpeas, fababeans, field peas, flax, mustard, soybeans, sunflower, and wheat (spring and durum), and modification of the use restrictions related to soil organic matter content, are acceptable when the product is used according to the label directions.

Value Assessment

The addition of a fall application timing on the AUTHORITY 480 Herbicide label for the control of labelled weeds in chickpeas, fababeans, field peas, flax, mustard, soybeans, sunflower, and wheat (spring and durum) 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 efficacy of a fall application of AUTHORITY 480 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 registered application rate and timing, i.e., pre-plant application.

A scientific rationale supported the change to the restriction for use of AUTHORITY 480 Herbicide on medium- and fine-textured soils.

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 480 Herbicide.

References

PMRA Document Number	Reference
3273834	2021, Value summary - Fall application of Authority 480 Herbicide, DACO: 10.1, 10.2.1, 10.2.2, 10.2.3, 10.2.3.1, 10.2.3.3, 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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