Health Canada Santé Canada

Evaluation Report for Category B, Subcategory 3.12 Application

Application Number: 2019-3633
Application: Changes to Product Label; New Site
Product: A15457 Fungicide
Registration Number: 31522
Active ingredients (a.i.): Benzovindiflupyr
PMRA Document Number: 3139265

Purpose of Application

The purpose of this application was to amend the product label of A15457 Fungicide to add sugar beets as a new crop.

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 sugar beets to the label of A15457 Fungicide represents an expansion of the use pattern for the active ingredient benzovindiflupyr. Therefore, updated mixer/loader/applicator and postapplication worker exposure quantitative risk assessments were conducted. No health risks of concern were identified provided that workers wear the appropriate personal protective equipment and follow all label directions.

New residue data for benzovindiflupyr in sugar beets were submitted to support the use expansion of this active on the A15457 Fungicide label. Benzovindiflupyr was applied to sugar beets at exaggerated rates, and harvested according to label directions. In addition, a processing study in treated sugar beets was reviewed to determine the potential for concentration of residues of benzovindiflupyr into processed commodities.

The use of benzovindiflupyr on sugar beets does not constitute a health risk of concern for acute or chronic dietary exposure (food and drinking water) to any segment of the population, including infants, children, adults and seniors. Sufficient crop residue data have been reviewed.

Canada

Maximum Residue Limit

The recommendation for a maximum residue limit (MRL) for benzovindiflupyr was based upon the submitted field trial data, and the guidance provided in the OECD MRL Calculator. The MRL to cover residues of benzovindiflupyr in/on sugar beet roots is proposed as shown in Table 1. Residues in processed commodities not listed in Table 1 are covered under the proposed MRL for the raw agricultural commodity (RAC).

Table 1 Summary of Field Trial and Processing Data Used to Support the Maximum Residue Limit (MRL)

Commodity	Application Method/ Total Application Rate (g a.i./ha)	PHI (days)	Residues (ppm)		Experimental Processing Factor	Currently Established MRL (ppm)	Recommended MRL (ppm)
			LAFT	HAFT			
Sugar beet roots	In-furrow + foliar/ 148-161	42-122	<0.01	0.073	<1x [molasses, refined sugar]	None	0.08

LAFT = Lowest Average Field Trial; HAFT = Highest Average Field Trial

No significant increase to the dietary burden of livestock is anticipated with the new use of benzovindiflupyr on sugar beets. As such, revisions to the MRLs established for livestock commodities are not required.

Following the review of all available data, the MRL as proposed in Table 1 is recommended to cover residues of benzovindiflupyr. Residues in these sugar beet roots at the proposed MRL will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

No new environmental data were submitted for the proposed use expansion. The method of application and maximum application rate are similar with the currently registered in-furrow or band application for benzovindiflupyr thus, there is no anticipated environmental risk associated with this use expansion of A15457 Fungicide for the control of rhizoctonia root and crown rot caused by *Rhizoctonia solani* on sugar beets in Canada.

Value Assessment

A scientific rationale and efficacy data from field trials conducted in the USA were provided in support of the use claim. Overall, A15457 Fungicide at the tested rates demonstrated its effectiveness against rhizoctonia root and crown rot at the level of suppression on sugar beets. A15457 is currently registered for suppression of the similar disease caused by the same pathogen on potato at the same rates. The value of A15457 for use on sugar beets by an in-furrow or a banded application was confirmed from both rationale and efficacy data.

The registration of this new use will provide Canadian growers with a new product to manage *Rhizoctonia* disease on sugar beets. In addition, this new use will be the first Group 7 fungicide for a post-emergence banded application; and the flexibility in the application method with A15457 will allow growers to use the product best fitting in their production practice.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information sufficient to add use on sugar beets.

References

PMRA Document Number	Reference
3017644	2019, Benzovindiflupyr (A15457R) -Magnitude of the Residues in or on Sugarbeets - Canada, 2017, DACO: 7.4.1,7.4.2
3017645	2019, Benzovindiflupyr (A18126B) - Magnitude of the Residues in or on Sugarbeets - USA, 2017, DACO: 7.4.1,7.4.2
3017648	2019, Value Summary, DACO: 10.1
3017650	2011, Evaluate X4601 for *Rhizoctonia* control in sugarbeet, DACO: 10.2.3.3
3017651	2011, Evaluate X4601 for *Rhizoctonia* control in sugarbeet, DACO: 10.2.3.3
3017652	2017, Efficacy trials for Elatus against *Rhizoctonia*, DACO: 10.2.3.3
3017653	2017, Efficacy trials for Elatus against *Rhizoctonia* in sugarbeet, DACO: 10.2.3.3