

Evaluation Report for Category C Subcategory 6.3 (URMULE) Application

Application Number: 2010-2051
Application: Category C, Subcategory 6.3 (URMULE)
Product: Dupont Coragen Insecticide
Registration Number: 28982
Active ingredients (a.i.): Chlorantraniliprole
PMRA Document Number English PDF: 2153432

Background

Dupont Coragen Insecticide has been registered since May 1, 2008. Dupont Coragen Insecticide is currently registered for use on fruiting vegetables group (except cucurbits), brassica vegetables group, leafy vegetables group and potatoes. For specific details of uses, application rates and methods, precautions, restrictions and personal protective equipment requirements, refer to the product label.

Purpose of Application

The purpose of this application was to amend the registration of Dupont Coragen Insecticide to include the claim for control of European corn borer and Corn Earworm on Sweet Corn in Canada. This product is intended for application at a rate of 250-375 ml/ha (50-75 g a.i./ha) and a maximum of 4 applications with a minimum of 3 day interval between application.

Chemistry Assessment

A chemistry assessment was not required as there was no change to the product chemistry.

Health Assessments

A toxicology assessment was not required since there was no change to the formulation.

To support the use expansion to sweet corn, residue data from supervised residue trials conducted in the US and Canada were reviewed, in which field corn was treated with chlorantraniliprole and harvested according to label directions.

Maximum Residue Limit

The recommendation for a maximum residue limit (MRL) for chlorantraniliprole in/on sweet corn kernels plus cob with husks removed (K+CWHR) was based on guidance provided in PRO2005-04 (“Guidance for Setting Pesticide Maximum Residue Limits Based on Field Trial Data”). Based on the residue data, a MRL to cover residues of chlorantraniliprole in/on sweet corn will be established as shown in Table 1.

Table 1. Summary of Field Trial Data Used to Establish Maximum Residue Limits (MRLs) for Chlorantraniliprole in/on Sweet Corn Kernels plus Cob with Husks removed.

Commodity	Application Method/ Total Application Rate (g a.i./ha)	PHI (days)	Residues (ppm)		Currently Established MRL (ppm)	Recommended MRL (ppm)
			Min	Max		
Field corn, K+CWHR	220-340	1	<0.01	<0.01	None	0.02 for sweet corn K+CWHR

Due to the low systemic toxicity of chlorantraniliprole, no toxicological endpoints of concern related to occupational exposure have been established for this active. Therefore, the exposure to chemical handlers and post application re-entry workers is not expected to result in unacceptable risk for the use on sweet corn.

Environmental Assessment

An environmental assessment was not required for the proposed label expansion as the application rates and method for this use expansion fall within the registered uses of the subject product. Therefore, the expansion of the current product label for the control of Colorado potato beetles on sweet corn is not expected to increase the environmental risk from DuPont Coragen Insecticide. Environmental concerns are addressed through environmental statements on the product label.

Value Assessment

Seven efficacy trials were provided for review. The trials used 2-4 applications of 25-100 g a.i./ha, and rated efficacy in terms of marketable and unmarketable yield, crop damage, and control of European corn borer (ECB) and corn earworm (CEW). All use patterns resulted in control of ECB and CEW and increased marketable yields. The rate of 100 g a.i./ha provided as good control of ECB and CEW as applications of 50-75 g a.i./ha. Four applications are supported based on the registered use of four applications to control ECB on potatoes. Based on these data and on registered uses of DuPont Coragen Insecticide for ECB control on other crops, a maximum of four applications at 250-375 mL product/ha (50-75 g ai/ha), with a minimum re-application interval of 3 days in a minimum of 100 L water/ha applied by ground to control ECB and CEW on sweet corn is acceptable.

Conclusion

The PMRA has completed an evaluation of the subject application and has found the information sufficient to amend the registration of Dupont Coragen Insecticide to include the claim of control of European corn borer and Corn Earworm on Sweet Corn in Canada

MRLs

Following the review of all available data, it was determined that an MRL of 0.02 ppm for residues of chlorantraniliprole in/on sweet corn kernels plus cob with husks removed is considered adequate to cover residues of chlorantraniliprole in/on this commodity as a result of this new use. Residues of chlorantraniliprole in sweet corn K+CWHR at the established MRL will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

References

PMRA

Document Number

Reference

1692604	2008, DPX-E2Y45: Magnitude of the residue on corn, DACO: 7.4.1
1692600	2008, Efficacy Report, DACO: 10.1
1692601	2008, Summary tables for AAFC07-037, DACO: 10.2.3.1
1692602	2008, Efficacy data reports for AAFC07-037, DACO: 10.2.3.3

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