Health Canada Santé Canada

Evaluation Report for Category B, Subcategory 5.0 Application

Application Number: 2017-0802
Application: New MRL for previously assessed TGAI
Product: 2,4-Dichlorophenoxyacetic Acid Flake Technical Herbicide
Registration Number: 16981
Active ingredient (a.i.): 2,4-D (present as acid)
PMRA Document Number: 2853054

Purpose of Application

The purpose of this application was to establish a maximum residue limit (MRL) for residues of 2,4-D in/on cottonseed commodities imported into Canada from the United States.

Chemistry, Environmental and Value Assessments

Chemistry, environmental and value assessments were not required for this application.

Health Assessments

Occupational exposure and toxicology assessments were not required for this application.

Residue data for 2,4-D in cotton were submitted to support the MRL on imported cottonseed. Supporting analytical methodology and freezer storage stability data were also reviewed. In addition, a processing study in treated cottonseed was reviewed to determine the potential for concentration of residues of 2,4-D into processed commodities.

Maximum Residue Limit

The recommendation for an MRL for 2,4-D was based upon the submitted field trial data, and the guidance provided in the OECD MRL Calculator. The MRL to cover residues of 2,4-D in/on crops and processed commodities 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).

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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			
Undelinted cottonseed	Pre- and post-emergent ground application/ 3324-3417	57-113	<0.01	0.07	<1X (Refined Oil)	None	0.08

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

Following the review of all available data, the MRL as proposed in Table 1 is recommended to cover residues of 2,4-D. Residues in cottonseed commodities at the proposed MRL will not pose an unacceptable health risk to any segment of the population, including infants, children, adults and seniors.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information sufficient to support the establishment of an MRL for residues of 2,4-D in/on cottonseed commodities imported into Canada.

References

PMRA#	Reference
2419859	2014, Rationale for not requiring an NOR for 2,4-D applied to AAD-12 Cotton, DACO: 6.3.
2419865	2013, Method Validation of the Determination of Residues of (2,4-dichlorophenoxy)acetic acid and Its Esters and Conjugates in Agricultural Commodities Using Liquid Chromatography with Tandem Mass Spectrometry Detection, DACO: 7.2.2.
2419866	2013, Independent Laboratory Validation of an Analytical Method for the Determination of 2,4-D and its Esters in Crop Matrices, DACO: 7.2.2.
2462280	2014, Frozen Storage Stability of Residues of 2,4-D and 2,4-DCP in Transgenic Cotton and Its Processed Fractions Containing the Aryloxyalkanoate Dioxygenase-12 (aad-12) Gene, DACO: 7.3.
2419861	2014, Magnitude of 2,4-D Residue in/on Transgenic Cotton Containing the Aryloxyalkanoate Dioxygenase-12 (aad-12) Gene - Residue and Decline Study, DACO: 7.2.1,7.3,7.4.1,7.4.2.
2419864	2014, Magnitude of the Residue of 2,4 D in/on Transgenic Cotton Containing the Aryloxyalkanoate Dioxygenase-12 (aad-12) Gene, Processing Study, DACO: 7.2.1,7.3,7.4.2,7.4.5.

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