

Evaluation Report for Category B, Subcategory 4.1 Application

Application Number:	2010-3432
Application:	Conversion to full registration
Product:	Deadline M-Ps
Registration Number:	26650
Active ingredients (a.i.):	Metaldehyde
PMRA Document Number	: 2585857

Purpose of Application

The purpose of this application was to convert the commercial molluscicide, Deadline M-Ps, to full registration status. Deadline M-Ps is a pellet formulation for control of slugs and snails on, cabbage, lettuce, tomatoes, berries, ornamental greenhouses, and ornamental plants.

Chemistry Assessment

Deadline M-Ps is formulated as a pellet containing metaldehyde at a nominal concentration of 4.00 %. This end-use product has a density of 0.722 g/mL. The chemistry requirements for Deadline M-Ps are complete.

Health Assessments

A toxicological assessment was not required for this application.

Commercial workers, who load and treat cabbage, lettuce, tomatoes, berries, and ornamentals (greenhouse and outdoor) using Deadline M-Ps, can come in direct contact with metaldehyde residues on the skin and by inhalation. Post-application re-entry worker exposures are expected to be negligible considering the product is applied to the soil surface. The label specifies that workers handling the commercial product wear personal protective equipment. Precautions to minimize risks to children were specified in the Re-evaluation Decision Document RVD2008-34-*Metaldehyde*, including prohibition of use unless children can be excluded from the treated area from the start of the application until the product is no longer visible. Taking into consideration the required label statements, the risks to these individuals are acceptable when following the listed precautions and directions on the registered label.

Residue data from field trials conducted in the United States were submitted to support the registration of Deadline M-Ps on blackberries, strawberries, cabbage, tomatoes, and lettuce. Metaldehyde was applied to raspberries, strawberries, cabbage, tomatoes, and lettuce at approved or exaggerated rates, with crops harvested within parameters outlined under label directions.

Maximum Residue Limits

The recommendation for maximum residue limits (MRLs) for metaldehyde



1

was based upon the submitted field trial data, and the guidance provided in the <u>OECD MRL</u> <u>Calculator</u>. MRLs to cover residues of metaldehyde in/on crops are proposed as shown in Table 1. Residues in processed commodities not listed in Table 1 are covered under the proposed MRLs for the raw agricultural commodities (RACs).

TABLE 1. Summary of Field Trial Data Used to Support Maximum Residue Limit(s) (MRLs)							
	Application		Residues (ppm)			Currently	
Commodity	Method/ Maximum Application Rate (kg ai/ha)	PHI (days)	LAFT	HAFT	Experimental Processing Factor	Established MRL (ppm)	Proposed MRL (ppm)
CSG13-07G	Soil	6.72 0	< 0.05	0.084		0.1	0.15
(Strawberries)	treatment/6.72					0.1	0.15
CSG13-07A (Blackberries/ Raspberries)	Soil treatment/4.78	0	<0.05	0.055		0.1	0.15
Head lettuce	Soil treatment/3.36	3	< 0.05	0.076		0.1	0.15
Leaf lettuce	Soil treatment/3.36	3	< 0.05	0.603		0.1	1.5
CSG8-09 (Tomatoes)	Soil treatment/3.36	9-11	< 0.05	0.082	Tomato paste and purée: 0.9	0.1	0.09
Cabbage	Soil treatment/3.36	19- 21	< 0.05	0.488		0.1	1.0

Following the review of all available data, MRLs as proposed in Table 1are recommended to cover residues of metaldehyde. Residues in these crops at the proposed MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

The Deadline M-Ps label has the appropriate environmental precautionary statements.

Value Assessment

A value assessment was not required for this application.

Conclusion

Following review of the application, The PMRA granted full registration to Deadline M-Ps for control of slugs and snails on, cabbage, lettuce, tomatoes, berries, ornamental greenhouses, and ornamental plants.

References

PMRA

Document	
Number	Reference
1446765	2003, Magnitude of the Residue of Metaldehyde in Cabbage Raw Agricultural Commodities, DACO: 7.4.1
1446767	2003, Magnitude of the Residue of Metaldehyde in Lettuce Raw Agricultural Commodities, DACO: 7.4.1
1446768	2003, Magnitude of the Residue of Metaldehyde in Strawberry Raw Agricultural Commodities, DACO: 7.4.1
1446769	2003, Magnitude of the Residue of Metaldehyde in Tomato Raw Agricultural Commodities, DACO: 7.4.1
1446770	2003, Magnitude of the Residue of Metaldehyde in Tomato Processed Commodities, DACO: 7.4.5
1446773	2003, Validation of the Analytical Method for the Determination of Metaldehyde in Crops by GC-MS Including Storage Stability in Metaldehyde in Various Crops (Part 2: Storage Stability), DACO: 7.3
1900389	2009, Metaldehyde Metabolism in Oilseed Rape, DACO: 6.3
1900390	2009, Metaldehyde Metabolism in Wheat, DACO: 6.3
1980825	2002, Independent Laboratory Validation for the Determination of Metaldehyde in Crops by GC-MS as Described in EN-CAS Analytical Laboratories Method ENC- 3/99, DACO: 7.2.3
1980827	2010, Magnitude of the Residue of Metaldehyde in Additional Lettuce Raw Agricultural Commodities, DACO: 7.4.1,7.4.2
1980829	2002, Metaldehyde: Magnitude of the Residue on Caneberry (Raspberry), DACO: 7.4.1,7.4.2
1980830	2003, Waiver Request for Confined Rotational Crop Study for Metaldehyde, DACO: 7.4.3
1980831	2008, Field Accumulation Of Metaldehyde In Rotational Crops, DACO: 7.4.4

ISSN: 1911-8082

8 Her Majesty the Queen in Right of Canada, represented by the Minister of Public Works and Government Services Canada 2016

All rights reserved. No part of this information (publication or product) may be reproduced or transmitted in any form or by any means, electronic, mechanical photocopying, recording or otherwise, or stored in a retrieval system, without prior written permission of the Minister of Public Works and Government Services Canada, Ottawa, Ontario K1A 0S5.