

Evaluation Report for Category B, Subcategory 1.3 Application

Application Number: 2008-0411
Application: Changes to the product specification form.
Product: Deltamethrin Technical Insecticide
Registration Number: 18092
Active ingredients (a.i.): Deltamethrin
PMRA Document Number: 1733251

Background

Deltamethrin Technical Insecticide (Reg No. 18092) was first registered in 1984.

Purpose of Application

The purpose of this application is to update the product specifications for Deltamethrin Technical Insecticide (Reg. No. 18092).

Chemistry Assessment

Common name: deltamethrin

Chemical name (IUPAC): (S)- α -cyano-3-phenoxybenzyl (1*R*,3*R*)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate

Chemical name (CAS): (S)-cyano(3-phenoxyphenyl)methyl (1*R*,3*R*)-3-(2,2-dibromoethenyl)-2,2-dimethylcyclopropanecarboxylate

Deltamethrin Technical Insecticide has the following properties:

Property	Results
Colour and physical state	Colourless crystals
Nominal concentration	99.5 %
Odour	Odourless
Density	0.5 g/cm ³
Vapour pressure	1.24 × 10 ⁻⁵ mPa
pH	5.9 in a 1% aqueous solution
Solubility in water	<0.002 mg/L
n-Octanol/water partition coefficient	Log Kow = 4.6 at 25°C

The chemistry requirements for Deltamethrin Technical Insecticide have been completed.

Health Assessments

The change in product specification does not impact on the toxicological profile of Deltamethrin Technical Insecticide.

The increased amount of the active ingredient, and the lowering of impurities in the Deltamethrin Technical Insecticide formulation will not significantly increase the residues of deltamethrin in treated crops, as any possible change in the guarantee of the active ingredient in the deltamethrin end-use products would be minimal. Therefore, no increase in dietary exposure is anticipated. The change in product specifications will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

An environmental assessment was not required.

Value Assessment

A value assessment was not required.

Conclusion

The PMRA has completed an assessment of available information for Deltamethrin Technical Insecticide and has found the information sufficient to support the update of the product specifications.

References

None

ISSN: 1911-8082

© Her Majesty the Queen in Right of Canada, represented by the Minister of Public Works and Government Services Canada 2009

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.