

Evaluation Report for Category B, Subcategory 1.1 and 1.3 Application

Application Number: 2015-4098
Application: Changes to the Technical Grade Active Ingredient Product Chemistry – New source for the same registration and specifications
Product: Lambda-Cy Technical Insecticide
Registration Number: 29026
Active ingredients (a.i.): Lambda-cyhalothrin
PMRA Document Number : 2641702

Background

Lambda-Cy Technical Insecticide (Registration Number 29026) was first registered for use, to formulate end-use products, in Canada in 2008. As a result of the lambda-cyhalothrin re-evaluation, up to date batch data for the two currently registered manufacturing sites for Lambda-Cy Technical Insecticide was requested (application 2010-4256).

Purpose of Application

The purpose of this application was to add a new manufacturing site to, and change the label guarantee of, Lambda-Cy Technical Insecticide. With the registration of the new manufacturing site, the two currently registered manufacturing sites will be deregistered.

Chemistry Assessment

Common Name: lambda-cyhalothrin
IUPAC* Chemical Name: Reaction product comprising equal quantities of (*R*)- α -cyano-3-phenoxybenzyl (1*S*,3*S*)-3-[(*Z*)-2-chloro-3,3,3-trifluoropropenyl]-2,2-dimethylcyclopropanecarboxylate and (*S*)- α -cyano-3-phenoxybenzyl (1*R*,3*R*)-3-[(*Z*)-2-chloro-3,3,3-trifluoropropenyl]-2,2-dimethylcyclopropanecarboxylate or of (*R*)- α -cyano-3-phenoxybenzyl (1*S*)-*cis*-3-[(*Z*)-2-chloro-3,3,3-trifluoropropenyl]-2,2-dimethylcyclopropanecarboxylate and (*S*)- α -cyano-3-phenoxybenzyl (1*R*)-*cis*-3-[(*Z*)-2-chloro-3,3,3-trifluoropropenyl]-2,2-dimethylcyclopropanecarboxylate
CAS† Chemical Name: (*R*)-cyano(3-phenoxyphenyl)methyl (1*S*,3*S*)-*rel*-3-[(1*Z*)-2-chloro-3,3,3-trifluoro-1-propen-1-yl]-2,2-dimethylcyclopropane carboxylate

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Lambda-Cy Technical Insecticide has the following properties:

Property	Result
Colour and physical state	White crystalline powder
Nominal concentration	98.1%
Odour	Slightly organic odour
Density at 25°C	1.313 kg/L
Vapour pressure at 20°C	0.0002 mPa
pH	6.8
Solubility in water at 20°C	2.94x10 ⁻⁶ g/L
n-Octanol/water partition coefficient at 20°C	Log K _{ow} = 7

The required chemistry data for Lambda-Cy Technical Insecticide have been provided, reviewed, and found to be acceptable.

Health, Environmental and Value Assessments

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

Conclusion

The PMRA has completed a review of all available information in support of Lambda-Cy Technical Insecticide and found it sufficient to support the registration of the new manufacturing site. As such, the two currently registered manufacturing sites will now be deregistered.

References

PMRA Document Number	Reference
2558637	2010, Production Chemistry of Lambda Cyhalothrin Technical, DACO: 2.11.1, 2.11.2, 2.11.3, 2.11.4, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9 CBI
2558635	2013, L-Cyhalothrin Quantification of Active Ingredient and Impurities Present at or Above 0.1% in Technical Lambda Cyhalothrin, DACO: 2.12.1, 2.13.1, 2.13.2, 2.13.3, 2.13.4 CBI
2558634	2015, Chemistry-2.1-2, 2.3.,2.3.1-Lambda Cy TGAI-17August2015, DACO: 2.1, 2.2, 2.3, 2.3.1

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.