



## Evaluation Report for Category B, Subcategory 1.1 Application

**Application Number:** 2021-5492  
**Application:** Changes to Technical Grade Active Ingredient (Product Chemistry)  
 – New Source (Site), Same Registrant  
**Product:** Lambda-Cy Technical Insecticide  
**Registration Number:** 29026  
**Active ingredient (a.i.):** Lambda-cyhalothrin  
**PMRA Document Number:** 3399850

### Purpose of Application

The purpose of this application was to register another source of Lambda-Cy Technical Insecticide and amend the label guarantee.

### Chemistry Assessment

**Common Name:** Lambda-cyhalothrin  
**IUPAC\* Chemical Name:** Reaction product comprising equal quantities of (*R*)- $\alpha$ -cyano-3-phenoxybenzyl (1*S*,3*S*)-3-[(*Z*)-2-chloro-3,3,3-trifluoropropenyl]-2,2-dimethylcyclopropanecarboxylate and (*S*)- $\alpha$ -cyano-3-phenoxybenzyl (1*R*,3*R*)-3-[(*Z*)-2-chloro-3,3,3-trifluoropropenyl]-2,2-dimethylcyclopropanecarboxylate or of (*R*)- $\alpha$ -cyano-3-phenoxybenzyl (1*S*)-*cis*-3-[(*Z*)-2-chloro-3,3,3-trifluoropropenyl]-2,2-dimethylcyclopropanecarboxylate and (*S*)- $\alpha$ -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-dimethylcyclopropanecarboxylate

\* 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 dust or powder

Property	Result
Nominal concentration	97.6%
Odour	Slightly organic odour
Density at 25°C	1.313 kg/L
Vapour pressure	0.0002 mPa at 20°C (extrapolated) 0.2 mPa at 60°C (extrapolated)
pH	6.8
Solubility in water	0.005 mg/L at 20-25°C
n-Octanol/water partition coefficient	log K <sub>ow</sub> = 5.5

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 Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information sufficient to register the additional source of Lambda-Cy Technical Insecticide and amend the label guarantee.

## References

<b>PMRA Document Number</b>	<b>Reference</b>
1284194	2003, Physical State, Colour and Odour of MCW-449 Technical, DACO: 2.14.1,2.14.2,2.14.3
1284195	2003, Melting Temperature of MCW-449 Technical, DACO: 2.14.4
1284196	2004, Waiver for Not Submitting Boiling Point/Boiling Range Data for Lambda-Cy Technical Insecticide, DACO: 2.14.5
1284197	2003, Relative Density of MCW-449 Technical, DACO: 2.14.6
1284201	Tomlin, C.D.S., 2000, Dissociation Constant, The Pesticide Manual 12th Edition 2000, DACO: 2.14.10
1284203	European Commission, 2001, UV/Visible Absorption Spectra, Review Report for the Active Substance-Lambda-Cyhalothrin, DACO: 2.14.12
1284204	2006, Stability (Temperature, Metals), DACO: 2.14.13
1284205	2003, Storage Stability of MCW-449 Technical at 54 C for 14 Days, DACO: 2.14.14
1284208	2003, pH of MCW-449 Technical, DACO: 2.16
3276437	2020, Validation of Analytical Methodology for the Assay of Active Ingredient and Related Significant Impurities and Subsequent 5 batches Qualitative and Quantitative Analysis of Lambda-cyhalothrin TC, DACO: 2.12.1,2.13.1,2.13.2,2.13.3,2.13.4 CBI
3276438	2020, Validation of Analytical Methodology for the Assay of [CBI REMOVED] Quantitative Analysis of Lambda-cyhalothrin TC, DACO: 2.12.1,2.13.1,2.13.2,2.13.3,2.13.4 CBI
3276440	2021, 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

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