

Evaluation Report for Category B, Subcategory 1.1 Application

Application Number: 2014-0308
Application: Changes to TGAI Product Chemistry – New Source (site) Same Registrant
Product: Lambda-Cyhalothrin Technical 2 Insecticide
Registration Number: 30818
Active ingredients (a.i.): Lambda-cyhalothrin [CYH]
PMRA Document Number : 2455085

Purpose of Application

The purpose of this application was to register an additional source of Lambda-cyhalothrin by the same registrant.

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-dimethylcyclopropanecarboxylate

Lambda-Cyhalothrin Technical 2 Insecticide has the following properties:

Property	Result
Colour and physical state	Colourless solid
Nominal concentration	98%
Odour	Odourless
Density at 20°C	1.33 g/mL
Vapour pressure	2×10^{-4} mPa at 20°C
pH	5.6

Property	Result
Solubility in water	5.0×10^{-3} mg/L
n-Octanol/water partition coefficient	Log K_{ow} = 7.0

The chemistry requirements for Lambda-Cyhalothrin Technical 2 Insecticide have been fulfilled.

Health Assessment, Environmental Assessment, and Value Assessment

These assessments were not required for this application.

Conclusion

PMRA has reviewed the information provided by the applicant for the additional source. It has been determined, based on this review, that this additional source is acceptable for registration.

References

7.1.1 Studies/Information Provided by Applicant/Registrant

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