

Evaluation Report for Category B, Subcategory 1.1 Application

Application Number: 2019-4322
Application: Changes to Technical Grade Active Ingredient (TGAI) Product Chemistry - New Source Same Registrant
Product: Flumethrin Technical Insecticide
Registration Number: 32502
Active ingredient (a.i.): Flumethrin
PMRA Document Number : 3142744

Purpose of Application

The purpose of this application was to register a new source for Flumethrin Technical Insecticide.

Chemistry Assessment

Common Name: Flumethrin
IUPAC* Chemical Name: (RS)- α -cyano-4-fluoro-3-phenoxybenzyl (1RS,3RS;1RS,3SR)-(EZ)-3-(β ,4-dichlorostyryl)-2,2-dimethylcyclopropane carboxylate
CAS† Chemical Name: cyano(4-fluoro-3-phenoxyphenyl)methyl 3-[2-chloro-2-(4-chlorophenyl)ethenyl]-2,2-dimethylcyclopropanecarboxylate

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Flumethrin Technical Insecticide has the following properties:

Property	Result
Colour and physical state	amber solid
Nominal concentration	97.0%
Odour	no distinguishable odour
Density	1.383 g/cm ³
Vapour pressure	< 2.4 x 10 ⁻⁵ Pa (at 25°C)
pH	4.51 (10 % dispersion in water)
Solubility in water	0.067 mg/L (31°C)
n-Octanol/water partition coefficient	log Kow = 7.52

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

Value, Health and Environmental Assessments

Value, health and environmental 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 support the registration of the new source for Flumethrin Technical Insecticide.

References

- 3026191 2019, Description of Starting Materials, DACO: 2.11.2
- 3026195 2019, Manufacturing Summary, DACO: 2.11.3 CBI
- 3026193 2019, Analytical Profile and Composition of 5 batch production of Flumethrin, DACO: 2.13.3 CBI
- 3026199 2019, Validation of Test Methods/Other Methods of the Ingredient, DACO: 2.13.1
- 3026196 2019, Method Validation - Test procedure of Flumethrin, DACO: 2.13.1
- 3026198 2019, Method Validation of Flumethrin using [CBI removed], DACO: 2.13.1
- 3026197 2019, Method Validation of Flumethrin using [CBI removed], DACO: 2.13.1
- 3117145 2020, [CBI removed] ([Privacy Information Removed]) (English), DACO: 2.13.3 CBI
- 3026200 2019, Proof of Product Equivalency, DACO: 2.16 CBI
- 3124790 2019, Analytical Profile and Composition of 5 Production Batches of Flumethrin, DACO: 2.13.3 CBI

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