Health Canada Santé Canada

Evaluation Report for Category B, Subcategory 1.1 Application

Application Number: 2021-2749
Application: Changes to Technical Grade Active Ingredient (Product Chemistry) – New Source (Site) Same Registrant
Product: FBN Deltamethrin Technical
Registration Number: 33996
Active ingredient (a.i.): Deltamethrin
PMRA Document Number: 3430483

Purpose of Application

The purpose of this application was to register a new manufacturing site for FBN Deltamethrin Technical.

Chemistry Assessment

Common Name: Deltamethrin
IUPAC* Chemical Name: (*S*)-α-cyano-3-phenoxybenzyl (1*R*,3*R*)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate
CAS† Chemical Name: (*S*)-cyano(3-phenoxyphenyl)methyl (1*R*,3*R*)-3-(2,2-dibromoethenyl)-2,2-dimethylcyclopropanecarboxylate

* International Union of Pure and Applied Chemistry
† Chemical Abstracts Service

FBN Deltamethrin Technical has the following properties:

Property	Result
Colour and physical state	White
Nominal concentration	99.9 %
Odour	Odourless
Density	0.5611 – 0.5621 g/mL at 20 °C
Vapour pressure	N/A
pH	6.3, 1 % solution
Solubility in water	< 0.00596 µg/mL
n-Octanol/water partition coefficient	log K_{ow} = 5.86

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

Health, Environmental and Value Assessments

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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 acceptable to support the registration of a new manufacturing site for FBN Deltamethrin Technical.

References

PMRA Document Number	Reference
3239777	2021, DACO 2 for FBN Deltamethrin Technical [Privacy Removed], DACO: 2.1,2.12.1,2.13.4,2.14.10,2.14.9,2.2,2.3,2.3.1,2.4,2.5,2.6,2.7,2.8,2.9 CBI
3239781	2020, Determination of pH of 1% (w/v) Aqueous Suspension/Solution and/or Acidity/Alkalinity of Deltamethrin Technical, DACO: 2.14.15,830.7000 CBI
3239782	2020, Determination of Melting Point and Melting Range of Deltamethrin Technical, DACO: 2.14.4 CBI
3239783	2020, Determination of Density, Relative Density and Specific Gravity of Deltamethrin Technical, DACO: 2.14.6 CBI
3239784	2020, Determination of Flammability of Deltamethrin Technical, DACO: 2.14.13 CBI
3239785	2020, Determination of Explosive Properties of Deltamethrin Technical, DACO: 2.14.13 CBI
3239786	2020, Determination of UV-VIS Absorption Spectra of Deltamethrin Technical, DACO: 2.14.12 CBI
3239787	2020, Determination of Boiling Point and/or Decomposition Point of Deltamethrin Technical, DACO: 2.14.5 CBI
3239788	2020, Determination of Appearance of Deltamethrin Technical, DACO: 2.14.1,2.14.2,2.14.3 CBI
3239789	2020, Oxidation/Reduction: Chemical Incompatibility of Deltamethrin Technical, DACO: 2.14.13 CBI
3239790	2020, Five Batch Analysis of Deltamethrin Technical, DACO: 2.13,2.13.1,2.13.2,2.13.3 CBI
3239791	2020, Five Batch Analysis of Deltamethrin Technical, DACO: 2.13,2.13.1,2.13.2,2.13.3 CBI
3239792	2021, Determination of Partition Coefficient of Deltamethrin Technical, DACO: 2.14.11 CBI
3239793	2021, Determination of Water Solubility of Deltamethrin Technical, DACO: 2.14.7 CBI
3239794	2021, Determination of Solubility of Deltamethrin Technical in Organic Solvents, DACO: 2.14.8 CBI
3239795	2021, Determination of [CBI Removed] Content in Deltamethrin Technical, DACO: 2.13.4 CBI
3239796	2021, Determination of [CBI Removed] Content in Deltamethrin Technical, DACO: 2.13.4 CBI
3309452	2021, Determination of [CBI Removed] Content in Deltamethrin Technical, DACO: 2.13.4 CBI
3421372	2022, Batch Statement, DACO: 2.13.3 CBI
3421374	2022, Manufacturing Process, DACO: 2.11.3 CBI