

Evaluation Report for Category B, Subcategory 1.1, 1.3 Application

Application Number: 2023-1882
Application: Changes to Technical Grade Active Ingredient (TGAI) Product Chemistry; New source (site) and Specifications
Applicant: Corteva AgriScience Canada Company
Product: Methoxyfenozide Technical Insecticide
Registration Number: 27785
Active ingredient (a.i.): Methoxyfenozide
PMRA Document Number: 3601383

Purpose of Application

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

Chemistry Assessment

Common Name: Methoxyfenozide
IUPAC* Chemical Name: N'-tert-butyl-N'-(3,5-dimethylbenzoyl)-3-methoxy-2-methylbenzohydrazide
CAS† Chemical Name: 3-methoxy-2-methylbenzoic acid 2-(3,5-dimethylbenzoyl)-2-(1,1-dimethylethyl)hydrazide

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Methoxyfenozide Technical Insecticide has the following properties:

Property	Result
Colour and physical state	White powder
Nominal concentration	98.2%
Odour	Faint odour
Density	1.618 g/cm ³ at 20°C
Vapour pressure	< 1.33 x 10 ⁻⁵ Pa at 25°C
pH	4.06 (1% aq soln.)
Solubility in water	3.3 mg/L

Property	Result
n-Octanol/water partition coefficient	$\log K_{ow} = 3.72$ at 25°C

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

Health Assessments

The toxicological profile of the new source of Methoxyfenozide Technical Insecticide is considered to be equivalent to that of the currently registered source.

Exposure and residue assessments were not required for this application.

Environmental and Value Assessments

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 source of methoxyfenozide for Methoxyfenozide Technical Insecticide.

References

PMRA

Document

Number

Reference

3463358 2023, Group A - Product Identity and Composition, Description of Materials Used to Produce the Product, Description of Production Process, Discussion of Formation of Impurities, Preliminary Analysis, Certified Limits, and Enforcement Analytical Method for Methoxyfenozide, DACO: 2.11.1, 2.11.2, 2.11.3, 2.11.4, 2.12.1, 2.13.1, 2.13.2, 2.13.3.

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