

Evaluation Report for Category B, Subcategory 1.3 Application

Application Number: 2023-6148
Application: Changes to Technical Grade Active Ingredient Product Chemistry-Specifications
Applicant: Syngenta Canada Inc.
Product: Benzovindiflupyr Technical
Registration Number: 31520
Active ingredient (a.i.): Benzovindiflupyr
PMRA Document Number: 3649746

Purpose of Application

The purpose of this application was to update the manufacturing process for two of the registered sources of Benzovindiflupyr Technical.

Chemistry Assessment

Common Name: Benzovindiflupyr
IUPAC* Chemical Name: *N*-[(1*RS*,4*SR*)-9-(dichloromethylene)-1,2,3,4-tetrahydro-1,4-methanonaphthalen-5-yl]-3-(difluoromethyl)-1-methyl-1*H*-pyrazole-4-carboxamide
CAS† Chemical Name: *N*-[9-(dichloromethylene)-1,2,3,4-tetrahydro-1,4-methanonaphthalen-5-yl]-3-(difluoromethyl)-1-methyl-1*H*-pyrazole-4-carboxamide

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Benzovindiflupyr Technical has the following properties:

Property	Result
Colour and physical state	White powder
Nominal concentration	97%
Odour	Odourless
Density	1.466 g/cm ³ at 20°C
Vapour pressure	3.2 × 10 ⁻⁹ Pa at 25°C
pH	6.9
Solubility in water	0.98 mg/L

Property	Result
n-Octanol/water partition coefficient	log K _{ow} = 4.3 at 25°C

The required chemistry data for Benzovindiflupyr Technical 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 acceptable to support the updated manufacturing processes for two of the registered sources of Benzovindiflupyr Technical.

References

PMRA

Document

Number

Reference

3519638	2023, Confidential Business Information Benzovindiflupyr Technical (Reg. No. 31520) Starting Materials, DACO: 2.11.2 CBI
3519639	2022, Manufacturing Process SYN545192 - Benzovindiflupyr, DACO: 2.11.3 CBI
3519640	2023, Benzovindiflupyr - Validation of Analytical Method [CBI REMOVED] for Determination of [CBI REMOVED], DACO: 2.13.1 CBI
3519641	2023, [CBI REMOVED]- Determination of [CBI REMOVED] in technical material by [CBI REMOVED] - Analytical Method, DACO: 2.13.1 CBI
3519642	2020, Benzovindiflupyr - Analysis of Five Representative Batches Produced at [PRIVACY INFO REMOVED], DACO: 2.13.3 CBI
3519643	2023, Benzovindiflupyr - Analysis of Five Representative Batches Produced at [PRIVACY INFO REMOVED], DACO: 2.13.3 CBI
3519644	2020, Benzovindiflupyr - Analysis of Five Representative Batches Produced at [PRIVACY INFO REMOVED], DACO: 2.13.3 CBI
3519645	2023, Benzovindiflupyr - Analysis of Five Representative Batches Produced at [PRIVACY INFO REMOVED], DACO: 2.13.3 CBI
3519646	2023, Confidential Business Information Benzovindiflupyr Technical (Reg. No. 31520) [CBI REMOVED], DACO: 2.13.4 CBI
3519647	2023, Confidential Business Information Benzovindiflupyr Technical (Reg. No. 31520) [CBI REMOVED], DACO: 2.13.4 CBI

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