

Evaluation Report for Category B, Subcategory B.1.1, B.1.3 Application

Application Number: 2015-5611
Application: Changes to TGAI Product Chemistry: New Source by same Registrant; Specifications
Product: Diflubenzuron Technical Insecticide
Registration Number: 25451
Active ingredients (a.i.): diflubenzuron
PMRA Document Number: 2622456

Background

While diflubenzuron was first registered in Canada as an active ingredient in 1977, the technical grade active ingredient product, Diflubenzuron Technical Insecticide, was granted Canadian registration in 1998.

Purpose of Application

The purpose of this application is to register a new alternate source for the diflubenzuron technical product, Diflubenzuron Technical Insecticide.

Chemistry Assessment

Common Name: Diflubenzuron
IUPAC* Chemical Name: N-[(4-chlorophenyl)carbamoyl]-2,6-difluorobenzamide
CAS† Chemical Name: N-[[4-(4-chlorophenyl)amino]carbonyl]-2,6-difluorobenzamide

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Diflubenzuron Technical Insecticide has the following properties:

Property	Result
Colour and physical state	off-white to yellow solid
Nominal concentration	98%
Odour	N/A
Density	1.562 g/cm ³
Vapour pressure	1.2 × 10 ⁻⁴ mPa (at 25°C)

Property	Result
pH	6.5 (1% water solution)
Solubility in water	0.08 mg/L (25°C, pH 7)
n-Octanol/water partition coefficient	log Kow = 3.89

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

Health Assessments

The toxicological profile for the new source of Diflubenzuron Technical Insecticide is expected to be similar to that of the registered source.

Environmental and Value Assessment

Environmental and value assessments were not required for this application.

Conclusion

The PMRA has completed an assessment of the available information and has found it sufficient to register a new alternate source of the technical product, Diflubenzuron Technical Insecticide.

References

PMRA Document Number	Reference
2574811	2015, CERTIFIED LIMITS OF DIFLUBENZURON TECHNICAL, DACO: 2.12.1,2.13.2,2.13.3,2.13.4 CBI
2574812	2015, CERTIFIED LIMITS OF DIFLUBENZURON TECHNICAL, DACO: 2.12.1,2.13.2,2.13.3,2.13.4 CBI
2574814	2015, PRODUCT IDENTITY AND COMPOSITION, DESCRIPTION OF MATERIALS, METHOD USED TO PRODUCE THE TECHNICAL MATERIAL, DESCRIPTION OF THE PRODUCTION PROCESS AND DISCUSSION OF THE FORMATION OF IMPURITIES IN DIFLUBENZURON TECHNICAL, DACO: 2.11.1,2.11.2,2.11.3,2.11.4,2.4,2.5,2.6,2.7,2.8,2.9 CBI
2574815	2015, PRODUCT IDENTITY AND COMPOSITION, DESCRIPTION OF MATERIALS, METHOD USED TO PRODUCE THE TECHNICAL MATERIAL, DESCRIPTION OF THE PRODUCTION PROCESS AND DISCUSSION OF THE FORMATION OF IMPURITIES IN DIFLUBENZURON TECHNICAL, DACO: 2.11.1,2.11.2,2.11.3,2.11.4,2.4,2.5,2.6,2.7,2.8,2.9
2574816	2015, Preliminary Analysis of Diflubenzuron Technical, DACO: 2.13.1,2.13.2,2.13.3,2.13.4 CBI
2574817	2015, Preliminary Analysis of Diflubenzuron Technical, DACO: 2.13.1,2.13.2,2.13.3,2.13.4

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