

Evaluation Report for Category B, Subcategory 1.3 Application

Application Number: 2017-1716

Application: Changes to TGAI chemistry specifications.

Product: Chlorfenapyr Technical Insecticide

Registration Number: 30664

Active ingredients (a.i.): Chlorfenapyr PMRA Document Number: 2808955

Purpose of Application

The purpose of this application was to amend the manufacturing process for Chlorfenapyr Technical Insecticide.

Chemistry Assessment

Common Name: Chlorfenapyr

IUPAC* Chemical Name: 4-bromo-2-(4-chlorophenyl)-1-ethoxymethyl-5-trifluoromethyl-

1*H*-pyrrole-3-carbonitrile

CAS† Chemical Name: 4-bromo-2-(4-chlorophenyl)-1-(ethoxymethyl)-5-(trifluoromethyl)-

1*H*-pyrrole-3-carbonitrile

Chlorfenapyr has the following properties:

Property	Result
Colour and physical state	pale yellow powder
Nominal concentration	97.1%
Odour	odourless
Density	1.6 g/cm
Vapour pressure	5.40 x 10 ⁻⁶ Pa (estimated at 25°C)
pН	7.16 (1% solution in water)
Solubility in water	0.14 mg/L at 20°C



^{*} International Union of Pure and Applied Chemistry

[†] Chemical Abstracts Service

Property	Result
n-Octanol/water partition coefficient	$\log K_{ow} = 5.24$

The required chemistry data for Chlorfenapyr Technical Insecticide 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 sufficient to support the amended manufacturing process for Chlorfenapyr Technical Insecticide.

References

PMRA Document

Number Reference

2747904 2016, Chlorfenapyr TGAI Description of the Manufacturing Process, DACO: 2.11.1,

2.11.3 CBI

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