

Evaluation Report for Category B, Subcategory B.1.2 Application

Application Number: 2016-1468
Application: Technical Grade Active Ingredient - New Source, New Registrant
Product: RBF BCDMH TGAI
Registration Number: 32732
Active ingredients (a.i.): Available chlorine and available bromine, present as 1-bromo-3-chloro-5,5-dimethylhydantoin and related hydantoins
PMRA Document Number: 2675636

Purpose of Application

The purpose of this application was to register a new source of the active ingredient by a new registrant.

Chemistry Assessment

Common Name: 1-bromo-3-chloro-5,5-dimethylhydantoin or BCDMH
IUPAC* Chemical Name: 1-bromo-3-chloro-5,5-dimethylpyrrolidine-2,4-dione
CAS† Chemical Name: 2,4-imidazolidinedione, 1-bromo-3-chloro-5,5-dimethyl-

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

RBF BCDMH TGAI has the following properties:

Property	Result
Colour and physical state	Off-white solid
Nominal concentration	68.4% available bromine and 28.2% available chlorine, both present as 1-bromo-3-chloro-5,5-dimethylhydantoin and related hydantoins
Odour	Slight halogen
Density	1.8 – 2.0 g/cm ³
Vapour pressure	Negligible
pH	3.97 for 0.1% solution
Solubility in water	0.15 g / 100 g (20°C)

Property	Result
n-Octanol/water partition coefficient	Log K _{ow} = 0.35

The required chemistry data for RBF BCDMH TGAI 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 registration of RBF BCDMH TGAI.

References

PMRA Document Number	Reference
2617961	2016, Applicant and Manufacturer Information, DACO: 2.1,2.2,2.3,2.3.1 CBI
2617962	2012, Chemistry, DACO: 2.11.1,2.11.2,2.11.3,2.11.4,2.12.1,2.4,2.5,2.6,2.7,2.8,2.9 CBI
2617963	2016, Determination of Oxidizing Power in Halobrom, DACO: 2.13.1 CBI
2617964	2015, Updated Certificate of Analysis, DACO: 2.13.3 CBI
2617965	2015, Analysis, DACO: 2.13.3 CBI
2617966	2016, Chem-Phys, DACO: 2.14.10,2.14.11,2.14.12,2.14.13,2.14.4,2.14.7,2.14.8,2.14.9 CBI
2617967	2016, Stability and corrosion test - Test reports and data Bavic Tablet Dissolving Tablet for Pool & Spa, DACO: 2.14.14 CBI
2668741	2016, Starting materials and suppliers, DACO: 2.11.2 CBI
2668742	2016, Data and methods for [CBI REMOVED], DACO: 2.12 CBI
2672149	2016, COA of BCDMH, DACO: 2.13.3 CBI
2672150	2016, Data, DACO: 2.13.3 CBI
2672151	2016, Methods of [CBI REMOVED], DACO: 2.13.1

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