

Evaluation Report for Category B, Subcategory 1.2 Application

Application Number: 2017-0404
Application: New TGAI Product Chemistry - New Source, New Registrant
Product: PelGar Bromadiolone Technical Rodenticide
Registration Number: #####
Active ingredient (a.i.): Bromadiolone
PMRA Document Number : 2814045

Purpose of Application

The purpose of this application was to register a new source of bromadiolone by a new registrant, based on precedent products.

Chemistry Assessment

Common Name: Bromadiolone
IUPAC* Chemical Name: 3-[(1*RS*,3*RS*;1*RS*,3*SR*)-3-(4'-bromobiphenyl-4-yl)-3-hydroxy-1-phenylpropyl]-4-hydroxycoumarin
CAS† Chemical Name: 3-[3-(4'-bromo[1,1'-biphenyl]-4-yl)-3-hydroxy-1-phenylpropyl]-4-hydroxy-2*H*-1-benzopyran-2-one

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

PelGar Bromadiolone Technical Rodenticide has the following properties:

Property	Result
Colour and physical state	Off-white powder
Nominal concentration	99.8%
Odour	odourless
Density	0.680 g/mL
Vapour pressure	2.13 x 10 ⁻⁵ mPa (at 25°C)
pH	N/A
Solubility in water	1.21 ppm at 25°C
n-Octanol/water partition coefficient	<u>pH</u>
	<u>log K_{ow}</u>
	7
4	>5.0

The required chemistry data for PelGar Bromadiolone Technical Rodenticide have been provided, reviewed, and found to be acceptable.

Health Assessments

The toxicological profile of the new source of bromadiolone technical is considered similar to that of the currently registered sources.

Environmental Assessment

There is no environmental concern with the presence of contaminants at the reported level in the bromadiolone product.

Value Assessment

A value assessment was 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 the new source of bromadiolone by a new registrant.

References

PMRA Document Number	Reference
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2721198	2008, 08-912021-001 Octanol Water Coefficient of Bromadiolone at pH 6, DACO: 2.14,2.14.11 CBI
2721199	2005, env7076-110414 The estimation of the adsorption coefficient (KOC) of Bromadiolone - February 2005, DACO: 2.14,2.16 CBI
2721200	2005, ch-105-2005 Technical Bromadiolone - UVVis, MS, IR, and NMR Spectra - May 16, 2005, DACO: 2.14,2.14.12
2721201	1999, 4745-98 Product chemistry_[CBI removed]_1999, DACO: 2.14,2.14.1, 2.14.11,2.14.12,2.14.13,2.14.15,2.14.2,2.14.3,2.14.4,2.14.5,2.14.6,2.14.7,2.14.9,830.7 000
2721202	2005, 2073-001 Determination of Solubility in Organic Solvents and Surface Tension - July 2005, DACO: 2.14,2.14.8
2726601	2016, Bromadiolone - Chemical Information, DACO: 2.5,2.6, 2.7,2.8,2.9
2726602	2016, AEWL16188 - MAL Brom tech manuf method, DACO: 2.11.1,2.11.2, 2.11.3,2.11.4 CBI
2789029	2017, Bromadiolone Manufacturing process & formation of impurities, DACO: 2.11.2,2.11.3,2.11.4 CBI

PMRA Document Number	Reference
2789030	2017, Batch data size letter, DACO: 2.13.3 CBI
2795145	2017, CA Brom tech manuf method additional, DACO: 2.11.3 CBI

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