

Evaluation Report for Category B, Subcategory 1.3 Application

Application Number: 2014-0425
Application: Changes to TGAI product chemistry specification.
Product: Tembotrione Technical Herbicide
Registration Number: 29657
Active ingredients (a.i.): Tembotrione
PMRA Document Number : 2433912

Purpose of Application

The purpose of this application was to amend the manufacturing process.

Chemistry Assessment

Common Name: tembotrione
Chemical Name: 2-{2-chloro-4-mesyl-3-[(2, 2, 2-trifluoroethoxy)methyl]benzoyl}cyclohexane-1, 3-dione
 or
 2-[2-chloro-4-(methylsulfonyl)-3-[(2, 2, 2-trifluoroethoxy)methyl]benzoyl]-1, 3-cyclohexanedione

Tembotrione Technical Herbicide has the following properties:

Property	Result
Colour and physical state	beige powder
Nominal concentration	tembotrione at 97.8%
Odour	no characteristic odour
Density	1.56 g/cm ³ at 20°C
Vapour pressure	<u>Temperature (°C)</u> <u>Vapour pressure (hPa)</u>
	20 1.1 × 10 ⁻¹⁰
	25 2.9 × 10 ⁻¹⁰
	50 2.6 × 10 ⁻⁸
pH	3.63 (1% solution)
Solubility in water	<u>pH</u> <u>Solubility (g/L)</u>
	4 0.22
	6.2 28.30

Property	Result	
n-Octanol/water partition coefficient	<u>pH</u>	<u>log Kow</u>
	2	2.16
	7	-1.09
	9	-1.37

The chemistry requirements for Tembotrione Technical Herbicide have been fulfilled.

Health Assessments

The changes to the product specifications for Tembotrione Technical Herbicide result in a product that is chemically equivalent to the previous product specifications. Subsequently, no toxicological data were reviewed or are required.

Residue and exposure assessments were not required for this application.

Environmental and Value Assessments

Environmental and value assessments were not required for this application.

Conclusion

The changes to the manufacturing process were approved by the PMRA.

References

PMRA

Document Number

Reference

- | | |
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