Health Canada Santé Canada

Evaluation Report for Category L, Subcategory 1.1 Application

Application Number: 2019-1828
Application: Submissions subject to PPIP policy-Equivalency
Product: Tide Mesotrione Technical Herbicide
Registration Number: **33765**
Active ingredient (a.i.): Mesotrione
PMRA Document Number: **3059230**

Purpose of Application

The purpose of this application was to register the technical grade active ingredient Tide Mesotrione Technical Herbicide, based on a precedent.

Chemistry Assessment

Common Name: Mesotrione
IUPAC* Chemical Name: 2-(4-mesyl-2-nitrobenzoyl)cyclohexane-1,3-dione
CAS† Chemical Name: 2-[4-(methylsulfonyl)-2-nitrobenzoyl]-1,3-cyclohexanedione

* International Union of Pure and Applied Chemistry
† Chemical Abstracts Service

Tide Mesotrione Technical Herbicide has the following properties:

Property	Result
Colour and physical state	Yellow solid
Nominal concentration	98.92%
Odour	Odourless
Density	0.83-0.92 g/mL
Vapour pressure	1.21 × 10-1 mPa
pH	3.78
Solubility in water	39 g/L (pH 7, 26°C)
n-Octanol/water partition coefficient	$\log K_{ow}$ = -2.41 (pH 7)

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The required chemistry data for Tide Mesotrione Technical Herbicide have been provided, reviewed, and found to beacceptable.

Value, Health and Environmental Assessments

Value, health and environmental assessments are 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 Tide Mesotrione Technical Herbicide.

References

PMRA Document Number	Reference
2987265	2019, Mesotrione Technical Herbicide - DACOs 2.1 through 2.9, DACO: 2.1, 2.2, 2.3, 2.3.1, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9 CBI
2987266	2014, Manufacturing Process and Quality Control of Mesotrione Technical, DACO: 2.11.1, 2.11.2, 2.11.3 CBI
2987275	2014, Discussion of the Presence of Impurities of Mesotrione Technical, DACO: 2.11.4 CBI
2987276	2015, Preliminary Analysis of Active Ingredient and Three Impurities in Mesotrione TGAI, DACO: 2.13.1 CBI
2987277	2015, Validation of Analytical Methodology for the Assay of Three Impurities in Mesotrione, DACO: 2.13.1 CBI
2987278	2015, Determination of Active Content and Impurity Profile of Mesotrione, DACO: 2.13.1, 2.13.3 CBI
2987279	2016, Determination of [CBI Removed] in Mesotrione, DACO: 2.13.3 CBI
2987280	2015, Confidential Attachment - Preliminary Analysis of Active Ingredient and Three Impurities in Mesotrione TGAI, DACO: 2.13.3 CBI
2987281	2014, Determination of Physical-chemical properties of Mesotrione, DACO: 2.14 CBI
2987282	2015, Physical Chemical Properties Test of Mesotrione TC: Dissociation constant, DACO: 2.14.10 CBI

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