Health Canada Santé Canada

Evaluation Report for Category L, Subcategory 1.1 Application

Application Number: 2019-1455
Application: Submissions Subject to Protection of Proprietary Interest in Pesticide Data Policy
Product: S-Metolachlor Technical Herbicide
Registration Number: 33827
Active ingredient (a.i.): S-Metolachlor and R-enantiomer
PMRA Document Number : 3076274

Purpose of Application

The purpose of this application was to register S-Metolachlor Technical Herbicide, a new source of the active ingredient S-Metolachlor and R-enantiomer, based on a precedent.

Chemistry Assessment

Common Name: S-Metolachlor and R-enantiomer
IUPAC* Chemical Name: mixture of 80–100% 2-chloro-2′-ethyl-N-[(1S)-2-methoxy-1-methylethyl]-6′-methylacetanilide and 20–0% 2-chloro-2′-ethyl-N-[(1R)-2-methoxy-1-methylethyl]-6′-methylacetanilide
CAS† Chemical Name: 2-chloro-N-(2-ethyl-6-methylphenyl)-N-[(1S)-2-methoxy-1-methylethyl]acetamide

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

S-Metolachlor Technical Herbicide has the following properties:

Property	Result
Colour and physical state	Clear yellow to brownish
Nominal concentration	98.3%
Odour	Faintly aromatic
Density	1.111 g/mL
Vapour pressure	2.19 mPa at 20°C
pH	7.1

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Property	Result
Solubility in water	493 mg/L at pH 7.4
n-Octanol/water partition coefficient	Log Kow = 3.1 at 20°C

The required chemistry data for S-Metolachlor Technical Herbicide have been provided, reviewed, and found to be acceptable.

Health Assessments

No toxicological information was reviewed or required.

Occupational and dietary exposure assessments were not required for this application.

Environmental and Value Assessments

Environmental and value assessments were not required for this application.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the available information and has found it sufficient to support the registration of S-Metolachlor Technical Herbicide.

References

PMRA Document Number	References
2980660	2019, Manufacturing Process and Quality Control of S-Metolachlor Technical, DACO: 2.11.1,2.11.3 CBI
2980661	2019, Justification of the Presence of Impurities of S-Metolachlor Technical, DACO: 2.11.4 CBI
2980662	2014, Determination of Active Content and Impurity Profile of S-Metolachlor, DACO: 2.13.1,2.13.2,2.13.3 CBI
2980663	2018, Determination of Toluene in S-Metolachlor, DACO: 2.13.1,2.13.2,2.13.3 CBI
2980664	2014, Determination of Physical-chemical properties of S-Metolachlor, DACO: 2.14 CBI
2980665	2014, Determination of Dissociation Constant of S-Metolachlor Technical, DACO: 2.14.10 CBI
3050955	2019, Determination of Active Content and Impurity Profile of S-Metolachlor, DACO: 2.13.1 CBI
3050953	2019, S-Metolachlor Technical Herbicide Clarification response letter, DACO: 0.8

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