

Evaluation Report for Category B, Subcategory 1.1 and 1.3 Application

Application Number: 2019-2958
Application: Changes TGAI Chemistry-New Source(site) Same Registrant and Specifications
Product: Aminocyclopyrachlor Technical Herbicide
Registration Number: 31915
Active ingredients (a.i.): Aminocyclopyrachlor
PMRA Document Number: 3126876

Purpose of Application

The purpose of this application was to register a new source of aminocyclopyrachlor for Aminocyclopyrachlor Technical Herbicide and to change the label guarantee.

Chemistry Assessment

Common Name: Aminocyclopyrachlor
IUPAC* Chemical Name: 6-amino-5-chloro-2-cyclopropylpyrimidine-4-carboxylic acid
CAS† Chemical Name: 6-amino-5-chloro-2-cyclopropyl-4-pyrimidinecarboxylic acid

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Aminocyclopyrachlor Technical Herbicide has the following properties:

Property	Result												
Colour and physical state	White solid												
Nominal concentration	91.2%												
Odour	Mild fruity odour												
Density	0.62 – 0.72 g/cm ³												
Vapour pressure	<table> <tr> <th>Temp. (°C)</th><th>vapour pressure (10⁻⁶ Pa)</th></tr> <tr> <td>40.0</td><td>2.1111</td></tr> <tr> <td>45.0</td><td>1.0799</td></tr> <tr> <td>50.0</td><td>1.1694</td></tr> <tr> <td>20</td><td>6.9215 (calculated)</td></tr> <tr> <td>25</td><td>4.9113 (calculated)</td></tr> </table>	Temp. (°C)	vapour pressure (10 ⁻⁶ Pa)	40.0	2.1111	45.0	1.0799	50.0	1.1694	20	6.9215 (calculated)	25	4.9113 (calculated)
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pH	3.2 – 3.5 (1% suspension)												

Property	Result	
Solubility in water	<u>Media</u>	<u>solubility (g/L)</u>
	Milli-Q water	2.81 ± 0.1
	Buffer (pH 4)	3.13 ± 0.26
	Buffer (pH 7)	4.20 ± 0.14
	Buffer (pH 9)	3.87 ± 0.17
n-Octanol/water partition coefficient	<u>pH</u>	<u>log K_{ow}</u>
	4	-1.01 ± 0.01
	7	-2.48 ± 0.02
	The active was not detected in the n-octanol phase at pH 9 due to its high water solubility. Consequently log K _{ow} at pH 9 was not calculated.	

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

Health Assessments

The toxicological profile of the new source of aminocyclopyrachlor is considered to be equivalent to that of the currently registered source.

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 information provided, and has found the information sufficient to amend the registration of Aminocyclopyrachlor Technical Herbicide.

References

PMRA Document Number	References
3006421	2019, Aminocyclopyrachlor (BCS-CD26868; MAT28) description of the manufacturing process of the technical grade active substance (Specification No. 102000036795), DACO:2.11.1,2.11.2,2.11.3 CBI
3006422	2019, Aminocyclopyrachlor technical grade active substance: Discussion of formation of impurities (Specification No.: 102000036795), DACO: 2.11.4 CBI
3006424	2019, Analytical method - Determination of (CBI Removed) in pure and technical grade aminocyclopyrachlor (BCS-CD26868) by (CBI Removed), DACO: 2.13.1 CBI.
3006425	2019, Validation of the (CBI Removed) analytical method (CBI Removed) determination of (CBI Removed) in technical grade and pure aminocyclopyrachlor (BCS-CD26868) by (CBI Removed), DACO: 2.13.1 CBI.
3006426	2011, Description and validation of the analytical method for determination of DPX-MAT28 in technical grade aminocyclopyrachlor, DACO: 2.13.1 CBI.
3006428	2008, Aminocyclopyrachlor (DPX-MAT28) - Determination of (CBI Removed) in technical aminocyclopyrachlor (DPX-MAT28)-(CBI Removed), DACO: 2.13.1 CBI
3006429	2019, Material accountability of technical aminocyclopyrachlor (BCS-CD26868 / DPX-MAT28), DACO: 2.13.1,2.13.2,2.13.3 CBI.
3006430	2019, Analytical method - Determination of (CBI Removed) in pure and technical grade aminocyclopyrachlor (BCS-CD26868) by (CBI Removed) DACO: 2.13.1 CBI
3006431	2019, Validation of the (CBI Removed) - Determination of (CBI Removed) in technical grade and pure aminocyclopyrachlor (BCS-CD26868) by (CBI Removed), DACO: 2.13.1 CBI
3083757	Clarification response, DACO. 2.11.3.
3092679	Aminocyclopyrachlor Technical Herbicide - Clarification response, DACO 2.13.1

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