

Evaluation Report for Category B, Subcategory 1.1 Application

Application Number: 2020-1627
Application: New/Changes to Technical Grade Active Ingredient (Product Chemistry) – New Source (site) same registrant
Product: Aminocyclopyrachlor Technical Herbicide
Registration Number: 31915
Active ingredient (a.i.): Aminocyclopyrachlor
PMRA Document Number: 3243319

Purpose of Application

The purpose of this application was to register a new source of aminocyclopyrachlor for the technical grade active ingredient product, Aminocyclopyrachlor Technical Herbicide.

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	<u>Temp (°C)</u>	<u>Vapour pressure (10⁻⁶ Pa)</u>
	40.0	2.1111
	45.0	1.0799
	50.0	1.1694
	20	6.9215 (calculated)
	25	4.9113 (calculated)

Property	Result	
pH	3.2–3.5 (1% suspension)	
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 required chemistry data for Aminocyclopyrachlor Technical Herbicide have been provided, reviewed, and found to be acceptable.

Health, Environmental and Value Assessments

Health, 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 a new source for Aminocyclopyrachlor Technical Herbicide.

Additional Information Being Requested

Since this technical product is manufactured only at pilot scale before registration, five-batch data representing commercial-scale production at the approved manufacturing site will be required as post-market information after registration.

References

PMRA Document Number	Reference
1998579	2010, Description and validation of the analytical method for determination of impurities in technical grade aminocyclopyrachlor (DPX-MAT28), DACO: 2.13.1
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
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
3006432	Anon., 2001, MT 30 Water ; 30.5 Karl Fischer method using pyridine-free reagents, DACO: 2.13.1 CBI
3115715	2020, Aminocyclopyrachlor {BCS-CD26868; MAT28) Description of the Manufacturing Process of the Technical Grade Active Substance {Specification No. 102000041169), DACO: 2.11.1,2.11.2,2.11.3 CBI
3115716	2020, Aminocyclopyrachlor Technical Grade Active Substance Discussion of Formation of Impurities, DACO: 2.11.4 CBI
3115719	2020, Material Accountability of technical Aminocyclopyrachlor (BCS-CD26868 / DPX-MAT28), DACO: 2.13.1,2.13.3 CBI

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