

Evaluation Report for Category B, Subcategory 1.2 Application

Application Number: 2021-4232

Application: New Technical Grade Active Ingredient (Product Chemistry) –

New Source (Site) New Registrant

Product: Imazapyr TC Technical Herbicide

Registration Number: 34834 **Active ingredient (a.i.):** Imazapyr **PMRA Document Number : 3445920**

Purpose of Application

The purpose of this application was to register Imazapyr TC Technical Herbicide, a new source of the active ingredient imazapyr.

Chemistry Assessment

Common Name: Imazapyr

IUPAC* Chemical Name: 2-[(4RS)-4-isopropyl-4-methyl-5-oxo-2-imidazolin-2-yl]pyridine-

3-carboxylic acid

CAS† Chemical Name: 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1*H*-imidazol-2-

yl]-3-pyridinecarboxylic acid

Imazapyr TC Technical Herbicide has the following properties:

Property	Result
Colour and physical state	White solid
Nominal concentration	98.5%
Odour	Slight odour of acetic acid
Bulk Density at 25°C	0.34 g/mL
Vapour pressure	< 0.013 mPa
рН	2.7 (1% aqueous)
Solubility in water	9.74 g/L at 15°C
	11.3 g/L at 25°C
n-Octanol/water partition coefficient	$Log K_{ow} = 0.11 (K_{ow} = 1.3)$

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



^{*} International Union of Pure and Applied Chemistry

[†] Chemical Abstracts Service

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 information provided, and has found the information acceptable to support the registration of Imazapyr TC Technical Herbicide.

References

PMRA Document Number	Reference
3262848	2021, Five-Batch Analysis of Imazapyr TC - Validation of Analytical Methodology for the Assay of Active Ingredient and Impurities in Imazapyr TC and Subsequent 5-Batch Analysis of the Test Item, DACO: 2.13.1,2.13.2,2.13.3,2.13.4 CBI
3262849	2021, Imazapyr TC TGAI Five-Batch Analysis of Imazapyr TC, [Privacy Info Removed] Final Report, DACO: 2.13.1,2.13.2,2.13.3,2.13.4 CBI
3318941	2022, Five Batch Analysis of Imazapyr Technical - Residual Solvent Test [CBI Removed], DACO: 2.13.4 CBI
3444632	2021, Manufacturing Process of Imazapyr TC (2023-03-10) - Deficiency Response, DACO: 2.11.3,2.11.4 CBI

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