

## Evaluation Report for Category L, Subcategory 1.1 Application

**Application Number:** 2023-0261  
**Application:** Application Subject to Protection of Proprietary Interests in Pesticide Data (PIIP) Policy – Equivalency/Data Compensation Assessment  
**Product:** Parijat Imazethapyr Technical  
**Registration Number:** 35105  
**Active ingredient (a.i.):** Imazethapyr  
**PMRA Document Number :** 3516904

### Purpose of Application

The purpose of this application was to register a new source of imazethapyr, Parijat Imazethapyr Technical, based on a registered precedent product.

### Chemistry Assessment

**Common Name:** Imazethapyr  
**IUPAC\* Chemical Name:** 5-ethyl-2-[(4*RS*)-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]-5-ethyl-3-pyridinecarboxylic acid

\* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Parijat Imazethapyr Technical has the following properties:

Property	Result
Colour and physical state	Off white, solid
Nominal concentration	98.35%
Odour	Odourless
Density	1.1043 – 1.1057 g/mL at 20°C
Vapour pressure	$3.1783 \times 10^{-6}$ mPa at 20°C (extrapolated)
pH	3.40 (1% w/v, 20°C)
Solubility in water	1.273 g/L (double distilled water), 2.150 g/L (pH 4), 13.317 g/L (pH 7), 8.229 g/L (pH 9)
n-Octanol/water partition coefficient	$\log K_{ow} = 0.85$ (double distilled water), 0.77 (pH 4.0), -1.64 (pH 7.0), -2.00 (pH 9.0)

The required chemistry data for Parijat Imazethapyr Technical 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 information provided, and has found the information acceptable to support the registration of Parijat Imazethapyr Technical.

### **References**

#### **PMRA**

#### **Document**

#### **Number**

#### **Reference**

3429420	2023, Parijat Imazethapyr Technical - Manufacturing Process, DACO: 2.11.1,2.11.2,2.11.3,2.11.4,2.12.1 CBI
3429432	2022, Determination of pH of 1 % (w/v) Aqueous Suspension of Imazethapyr Technical, DACO: 2.14.15,830.7000
3429433	2022, Determination of Melting Point Imazethapyr Technical, DACO: 2.14.4
3429434	2022, Determination of Density, Relative Density and Specific Gravity of Imazethapyr Technical, DACO: 2.14.6
3429435	2022, Determination of Appearance (Color, Odor and Physical State) of Imazethapyr Technical, DACO: 2.14.1,2.14.2,2.14.3
3429436	2022, Determination of Oxidizing Properties of Imazethapyr Technical, DACO: 2.16
3429437	2022, Explosive Properties of Imazethapyr Technical, DACO: 2.16
3429438	2022, Accelerated Storage Stability Test, Stability to Normal, Elevated Temperatures, Metals, Metal Ions and Corrosion Characteristics of Imazethapyr Technical, DACO: 2.14.13,2.14.14
3429439	2022, Determination of Vapour Pressure of Imazethapyr Technical, DACO: 2.14.9
3429440	2022, UV-VIS Absorption Spectra of Imazethapyr Technical, DACO: 2.14.12
3429441	2022, Determination of Boiling Point of Imazethapyr Technical, DACO: 2.14.5
3429442	2022, Determination of Solubility of Imazethapyr Technical in Organic Solvents, DACO: 2.14.8
3429443	2022, Determination of Water Solubility of Imazethapyr Technical, DACO: 2.14.7

3429444 2022, Determination of Dissociation Constant(s) of Imazethapyr Technical, DACO: 2.14.10

3429445 2022, Determination of Partition Coefficient (n-Octanol/Water) of Imazethapyr Technical, DACO: 2.14.11

3429446 2022, Five Batch Analysis of Imazethapyr Technical, DACO: 2.13.1,2.13.2,2.13.3,2.13.4

3515806 2023, Response to Chemistry Clarifications Received October 16, 2023 [Privacy Info Removed] for Sub. #2023-0261 Parijat Imazethapyr Technical, DACO: 2.11.2,2.11.4,2.12,2.13.3 CBI

3515807 2023, Manufacturing Process Imazethapyr Technical, DACO: 2.11.1,2.11.2,2.11.3,2.11.4 CBI

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