



Evaluation Report for Category L, Subcategory 1.1 Application

Application Number: 2022-4977
Application: Application Subject to Protection of Proprietary Interests in Pesticide Data (PIIP) Policy – Equivalency/Data Compensation Assessment
Product: Miraculous Glufosinate ammonium Technical
Registration Number: 35081
Active ingredient (a.i.): Glufosinate-ammonium
PMRA Document Number: 3518476

Purpose of Application

The purpose of this application was to register Miraculous Glufosinate ammonium Technical, a new source of glufosinate-ammonium, based on a registered precedent product.

Chemistry Assessment

Common Name: Glufosinate-ammonium
IUPAC* Chemical Name: ammonium [(3*RS*)-3-amino-3-carboxypropyl]methylphosphinate
CAS† Chemical Name: 2-amino-4-(hydroxymethylphosphinyl)butanoic acid
monoammonium salt

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Miraculous Glufosinate ammonium Technical has the following properties:

Property	Result
Colour and physical state	White solid
Nominal concentration	98.35%
Odour	Characteristic odour
Density	1371.2 g/L at 20°C
Vapour pressure	3.59×10^{-6} mPa at 25°C (extrapolated)
pH	5.78 at 20°C
Solubility in water	6.13×10^5 mg/L (pH 6.44, 20°C)
n-Octanol/water partition coefficient	$\log K_{ow} = < -2.64$ (pH 7.31)

The required chemistry data for Miraculous Glufosinate ammonium 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 Miraculous Glufosinate ammonium Technical.

References

PMRA

Document

Number	Reference
3392068	2021, Discussion of formation of impurities, DACO: 2.11.4
3392069	2021, 5 Batch Data of Miraculous Glufosinate ammonium Technical, DACO: 2.13.1,2.13.3 CBI
3392070	2020, Color, Physical State and Odour of Miraculous Glufosinate ammonium Technical, DACO: 2.14.1,2.14.2,2.14.3
3392071	2020, Melting point, DACO: 2.14.4
3392072	2020, Density, DACO: 2.14.6
3392073	2020, Solubility in water and solvent, DACO: 2.14.7,2.14.8
3392074	2020, Vapour pressure, DACO: 2.14.9
3392075	2022, Dissociation constant, DACO: 2.14.10
3392076	2020, Partition coefficient, DACO: 2.14.11
3392077	2020, UV-VIS Absorption Spectra, DACO: 2.14.12
3392078	2020, Stability, DACO: 2.14.13
3392079	2020, Accelerated Storage Stability, DACO: 2.14.14
3392080	2020, pH of Miraculous Glufosinate ammonium Technical, DACO: 2.14.15,830.7000
3397834	2020, Methodology and Confirmation of Identity, DACO: 2.13.1,2.13.2
3398050	2021, Manufacturing Process of Miraculous Glufosinate ammonium Technical, DACO: 2.11.1,2.11.3 CBI
3450667	2023, Impurities of Toxicological Concern, DACO: 2.13.4

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