

Evaluation Report for Category B, Subcategory 1.1, 1.3 Application

Application Number: 2015-1977
Application: New / Changes TGAI or ISP Prod Chemistry-New Source(site) same registrant and New / Changes TGAI or ISP Prod Chemistry-Specifications
Product: NewAgco Glufosinate Technical
Registration Number: 30613
Active ingredients (a.i.): Glufosinate-ammonium
PMRA Document Number: 2605327

Purpose of Application

The purpose of this application was to amend the product NewAgco Glufosinate Technical by adding two new alternate sources and by modifying the manufacturing process.

Chemistry Assessment

Common Name: Glufosinate-ammonium
IUPAC* Chemical Name: Ammonium (2*RS*)-2-amino-4-(methylphosphinato)butyric acid
CAS† Chemical Name: 2-amino-4-(hydroxymethylphosphinyl)butanoic acid monoammonium salt

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

NewAgco Glufosinate Technical has the following properties:

Property	Result
Colour and physical state	White solid
Nominal concentration	97.5%
Odour	Odourless
Density	1.2915-1.613 g/mL at 20°C
Vapour pressure	2.42 x 10 ⁻⁸ mPa (20°C) 1.20 x 10 ⁻⁷ mPa (25°C)
pH	3.76-4.32 (1% aqueous solution)

Property	Result
Solubility in water	644.4 g/L at 20°C
n-Octanol/water partition coefficient	Log K _{ow} = <-1.43 (pH 7)

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

Health Assessments

The proposed sources of Newagco Glufonisate Technical result in a product that is chemically equivalent to that of the previous source. Subsequently, no toxicological data were reviewed or are required.

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 in support of the product, Newagco Glufonisate Technical, and has found the information sufficient to add new alternate sources and to modify the manufacturing process.

References

Studies/Information Provided by Applicant/Registrant

PMRA Document Number	Reference
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2534571	2015, Manufacturing Process And Synthesis Pathway Product: Glufosinate-Ammonium Technical Grade Material, DACO: 2.11.1,2.11.2,2.11.3,2.11.4 CBI
2534572	2013, Preliminary Analysis of Glufosinate-ammonium TGAI, DACO: 2.13.1, 2.13.2,2.13.3,2.13.4 CBI
2534573	2013, Preliminary Analysis of Glufosinate-ammonium TGAI, DACO: 2.13.1, 2.13.2,2.13.3,2.13.4 CBI
2534575	2013, Preliminary Analysis of Glufosinate-ammonium TGAI, DACO: 2.13.1, 2.13.2,2.13.3,2.13.4 CBI
2534577	2014, Chemical and Physical Characterization of Glufosinate-ammonium TGAI: Color, Physical State, Odor, DACO: 2.14.1,2.14.2,2.14.3
2534579	2014, Chemical and Physical Characterization of Glufosinate-ammonium TGAI: Dissociation Constant, DACO: 2.14.10
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2534581	2014, Chemical and Physical Characterization of Glufosinate-ammonium TGAI: UV-VIS Absorption, DACO: 2.14.12
2534582	2014, Chemical and Physical Characterization of Glufosinate-ammonium TGAI: Stability and Corrosion, DACO: 2.14.14 CBI
2534584	2014, Chemical and Physical Characterization of Glufosinate-ammonium TGAI: pH, DACO: 2.14.15,830.7000
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2534591	2015, Material Safety Data Sheet of [CBI Removed], DACO: 2.11.2 CBI
2534592	2015, Material Safety Data Sheet of [CBI Removed], DACO: 2.11.2 CBI
2534593	2015, Summary of the Starting Materials for Glufosinate Technical from [CBI Removed], DACO: 2.11.2 CBI
2534594	2015, Material Safety Data Sheet of [CBI Removed], DACO: 2.11.2
2534595	2015, Material Safety Data Sheet of [CBI Removed], DACO: 2.11.2 CBI
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- 2534598 2015, Material Safety Data Sheet of [CBI Removed], DACO: 2.11.2 CBI
- 2534599 2015, Material Safety Data Sheet of [CBI Removed], DACO: 2.11.2 CBI
- 2534600 2015, Material Safety Data Sheet of [CBI Removed], DACO: 2.11.2 CBI
- 2534601 2015, Material Safety Data Sheet of [CBI Removed], DACO: 2.11.2 CBI
- 2534602 2013, Material Safety Data Sheet of [CBI Removed], DACO: 2.11.2 CBI
- 2534603 2013, Material Safety Data Sheet of [CBI Removed], DACO: 2.11.2 CBI
- 2534604 2015, Material Safety Data Sheet of [CBI Removed], DACO: 2.11.2 CBI
- 2534605 2015, Material Safety Data Sheet of [CBI Removed], DACO: 2.11.2 CBI
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- 2534611 2015, Material Safety Data Sheet of [CBI Removed], DACO: 2.11.2 CBI
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- 2534616 2013, Glufosinate-Ammonium TC Product Chemistry, DACO: 2.14.1,2.14.13,2.14.15, 2.14.2,2.14.3,2.14.4,2.14.6,2.16,830.7000
- 2534617 2014, Chemical and Physical Characterization of Glufosinate-ammonium TGAI: Melting Point, Partition Coefficient, Solubility and Vapour Pressure, DACO: 2.14.11, 2.14.4,2.14.7,2.14.8,2.14.9
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- 2597875 2016, The manufacturing process for glufosinate [CBI Removed], DACO: 2.11.3 CBI

ISSN: 1911-8082

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