

Evaluation Report for Category B, Subcategory B.1.1 Application

Application Number: 2011-5343
Application: New Source of Technical Grade Active Ingredient, Same Registrant
Product: Glufosinate Ammonium Technical Herbicide
Registration Number: 23178
Active ingredients (a.i.): Glufosinate Ammonium
PMRA Document Number : 2209047

Purpose of Application

The purpose of this application was to register an alternate manufacturing site for the technical product, Glufosinate Ammonium Technical Herbicide (registration number 23178). There was a concurrent application (2011-5887) in process for the associated manufacturing concentrate, Glufosinate Ammonium Manufacturing Concentrate Herbicide (registration number 23184).

Chemistry Assessment

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

Glufosinate Ammonium Technical Herbicide has the following properties:

| Property | Result |
|--|-----------------------------------|
| Colour and physical state | White Crystalline Solid |
| Nominal concentration | 95.5 % |
| Odour | Slight pungent odour |
| Density at 20°C | 1.4 kg/L |
| Vapour pressure at 20°C | <0.1 mPa |
| pH | 7.0 ±1 (1% w/v) |
| Water solubility at 22°C | 1370 g/L |
| n-Octanol/water partition coefficient (K _{ow}) at 22°C | Log K _{ow} < 0.1 at pH 7 |

The chemistry requirements for Glufosinate Ammonium Technical Herbicide have been completed.

Health Assessments

The new source of Glufosinate Ammonium Technical Herbicide results in a product chemically equivalent to that of the previously registered source. As such, no new toxicological data were submitted or are required.

Environmental and Value Assessments

Environmental and value assessments were not required for this application.

Conclusion

Following review of all the available information, the application to add an additional site of manufacture for Glufosinate Ammonium Technical Herbicide was approved.

References

| PMRA Reference Number | Reference: |
|------------------------------|---|
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| 2124792 | 2008, Glufosinate-ammonium technical Material Discussion of the Formation of Impurities in Glufosinate-ammonium Technical, DACO: 2.11.4 CBI. |
| 2124793 | 2008, Material accountability of AE F039866 Glufosinate-ammonium manufactured, DACO: 2.12.1,2.13.2,2.13.3 CBI |
| 2124794 | 2008, Validation of the analytical method AM021208FP1 for glufosinate ammonium technical grade and pure active substance and technical concentrate, DACO: 2.13.1 CBI. |
| 2124795 | 2008, Validation of the analytical method AM021108FP1 for glufosinate ammonium technical, DACO: 2.13.1 CBI. |
| 2124796 | 2008, Validation of -method AM020708FP1 Determination of AE F039866 (Glufosinate-ammonium) in technical concentrate, technical grade and pure active substance, DACO: 2.13.1 CBI. |
| 2124798 | 2008, Validation of IC - Method AM020808FP1 in AE F039866 (Glufosinate-Ammonium) Technical Materials and Technical Concentrates, DACO: 2.13.1 CBI. |
| 2124799 | 2008, Validation of the analytical method AM021308FP1 for technical grade glufosinate ammonium, in pure active substance and in technical concentrate, CBI. |
| 2124800 | 2008, Validation of GC-method AM019408FP1 in AE F039866 technical materials, AE F039866 technical concentrates and pure AE F039866, DACO: 2.13.1 CBI. |
| 2192009 | 2008, Analytical method - Determination of AE F039866 (Glufosinate-ammonium) in technical concentrate, technical grade and pure active substance, DACO: 2.13.1 CBI. |

ISSN: 1911-8082

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