

Evaluation Report for Category L, Subcategory 1.1 Application

Application Number: 2022-3077
Application: Application subject to the Protection of Proprietary Interests in Pesticide Data Policy
Product: NewAgco Sulfentrazone Technical II Herbicide
Registration Number: 34911
Active ingredient (a.i.): Sulfentrazone
PMRA Document Number : 3456635

Purpose of Application

The purpose of this application was to register a new source of sulfentrazone technical based on precedent.

Chemistry Assessment

Common Name: Sulfentrazone
IUPAC* Chemical Name: 2',4'-dichloro-5'-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1*H*-1,2,4-triazol-1-yl]methanesulfonamide
CAS† Chemical Name: *N*-[2,4-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1*H*-1,2,4-triazol-1-yl]phenyl]methanesulfonamide

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

NewAgco Sulfentrazone Technical II Herbicide has the following properties:

Property	Result										
Colour and physical state	Off-white										
Nominal concentration	95.5 %										
Odour	Mild sulphur like										
Density	1.6497 g/mL										
Vapour pressure	2.0606 × 10 ⁻³ mPa at 20°C 9.1601 × 10 ⁻³ mPa at 25°C										
pH	6.58										
Solubility in water	<table border="1"> <thead> <tr> <th>pH</th> <th>Solubility (g/L)</th> </tr> </thead> <tbody> <tr> <td>deionized</td> <td>0.5743</td> </tr> <tr> <td>4</td> <td>0.2502</td> </tr> <tr> <td>7</td> <td>0.8416</td> </tr> <tr> <td>9</td> <td>2.7500</td> </tr> </tbody> </table>	pH	Solubility (g/L)	deionized	0.5743	4	0.2502	7	0.8416	9	2.7500
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deionized	0.5743										
4	0.2502										
7	0.8416										
9	2.7500										

Property	Result	
n-Octanol/water partition coefficient	pH	$\log(K_{ow})$
	deionized	1.51
	4	1.52
	7	1.18
	9	-0.67

The required chemistry data for NewAgco Sulfentrazone Technical II Herbicide 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 register NewAgco Sulfentrazone Technical II Herbicide.

References

PMRA Document Number	Reference
3369490	2021, Determination of Appearance (Color, Odor and Physical State) of Sulfentrazone Technical, DACO: 2.14.1,2.14.2,2.14.3
3369491	2021, Accelerated Storage Stability Test and Corrosion Characteristics of Sulfentrazone Technical, DACO: 2.14.13
3369492	2021, Stability to Metals and Metal Ions of Sulfentrazone Technical, DACO: 2.14.13
3369493	2021, Determination of pH of 1% (w/v) Aqueous Suspension/Solution of Sulfentrazone Technical, DACO: 2.14.15,830.7000
3369494	2021, Determination of Melting Range and Melting Point of Sulfentrazone Technical, DACO: 2.14.4
3369495	2021, Determination of Dissociation Constant(s) of Sulfentrazone Technical, DACO: 2.14.10
3369496	2021, Determination of Density, Relative Density and Specific Gravity of Sulfentrazone Technical, DACO: 2.14.6
3369497	2021, Determination of Partition Coefficient (n-Octanol/Water) of Sulfentrazone Technical, DACO: 2.14.11
3369498	2021, Determination of Water Solubility of Sulfentrazone Technical, DACO: 2.14.7
3369499	2021, Determination of Solubility of Sulfentrazone Technical in Organic Solvents, DACO: 2.14.8
3369500	2021, UV-VIS Absorption Spectra of Sulfentrazone Technical, DACO: 2.14.12
3369501	2021, Determination of Vapour Pressure and Henrys Law Constant of Sulfentrazone Technical, DACO: 2.14.9

3369502	2022, Manufacturing Process of Sulfentrazone Technical, DACO: 2.11.1, 2.11.2, 2.11.3, 2.11.4 CBI
3374902	2020, Five Batch Analysis of Sulfentrazone Technical, DACO: 2.13.1,2.13.2,2.13.3
3374903	2020, Five Batch Analysis of Sulfentrazone Technical - Confidential Attachment, DACO: 2.13.1,2.13.2,2.13.3,2.13.4 CBI
3403777	2022, Batch Statement, DACO: 2.13.3 CBI
3403778	2022, Five Batch Analysis of Sulfentrazone Technical, DACO: 2.13.4 CBI

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