

Evaluation Report for Category B, Subcategory 1.1 Application

Application Number: 2020-3864
Application: Changes to TGAI Product Chemistry – New Source (site) same registrant
Product: Pyroxsulam Technical Herbicide
Registration Number: 28886
Active ingredient (a.i.): Pyroxsulam
PMRA Document Number : 3264934

Purpose of Application

The purpose of this application was to add another manufacturing site to Pyroxsulam Technical Herbicide.

Chemistry Assessment

Common Name: Pyroxsulam
IUPAC* Chemical Name: N-(5,7-dimethoxy[1,2,4]triazolo[1,5-a]pyrimidin-2-yl)-2-methoxy-4-(trifluoromethyl)pyridine-3-sulfonamide
CAS† Chemical Name: N-(5,7-dimethoxy[1,2,4]triazolo[1,5-a]pyrimidin-2-yl)-2-methoxy-4-(trifluoromethyl)-3-pyridinesulfonamide

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Pyroxsulam Technical Herbicide has the following properties:

Property	Result										
Colour and physical state	Off-white solid										
Nominal concentration	99.0%										
Odour	Spicy odour										
Density	1.618 g/cm ³ (at 20°C)										
Vapour pressure	< 1 × 10 ⁻⁷ Pa										
pH	4.06 (1% solution, 24.4°C)										
Solubility in water	<table style="border: none;"> <thead> <tr> <th style="border: none;">pH</th> <th style="border: none;">Solubility (g/L)</th> </tr> </thead> <tbody> <tr> <td style="border: none;">purified water</td> <td style="border: none;">0.0626</td> </tr> <tr> <td style="border: none;">4</td> <td style="border: none;">0.0164</td> </tr> <tr> <td style="border: none;">7</td> <td style="border: none;">3.20</td> </tr> <tr> <td style="border: none;">9</td> <td style="border: none;">13.7</td> </tr> </tbody> </table>	pH	Solubility (g/L)	purified water	0.0626	4	0.0164	7	3.20	9	13.7
pH	Solubility (g/L)										
purified water	0.0626										
4	0.0164										
7	3.20										
9	13.7										

Property	Result	
n-Octanol/water partition coefficient	<u>pH</u>	<u>log K_{ow}</u>
	4	1.08
	7	-1.01
	9	-1.60

The required chemistry data for Pyroxsulam Technical 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 it acceptable to add another manufacturing site to Pyroxsulam Technical Herbicide.

References

PMRA Document Number	References
3147813	2020, Group A - Product Identity and Composition, Description of Materials Used to Produce the Product, Description of Production Process, Discussion of Formation of Impurities, Preliminary Analysis, Certified Limits, and Enforcement Analytical Method for Pyroxsulam, DACO: 2.11.1, 2.11.2, 2.11.3, 2.11.4, 2.13.1, 2.13.2, 2.13.3, 2.13.4 CBI
3263769	2021, Corteva batch data clarification response, Pyroxsulam Tech 2020-3864, DACO: 2.13.3 CBI
1283065	2006, Group B: Physical and Chemical Properties of XDE-742, DACO: 2.14.1, 2.14.10, 2.14.11, 2.14.12, 2.14.13, 2.14.2, 2.14.3, 2.14.4, 2.14.5, 2.14.6, 2.14.7, 2.14.8, 2.14.9 CBI
1283060	2006, Group A - Product Identity and Composition, Description of Materials to Produce the Product, Description of the Production Process, Discussion of Formation of Impurities, Preliminary Analysis, Certified Limits, and Enforcement Analytical Method for XDE-742 Technical, DACO: 2.11.1, 2.11.2, 2.11.3, 2.11.4, 2.12, 2.12.1, 2.13.1, 2.13.2, 2.13.3, 2.13.4 CBI

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