

Evaluation Report for Category B, Subcategory 1.1 Application

Application Number: 2021-1368
Application: Changes TGAI Product Chemistry-New Source (site) - same registrant
Product: Clethodim Technical Herbicide
Registration Number: 28211
Active ingredients (a.i.): Clethodim
PMRA Document Number: 3253705

Purpose of Application

The purpose of this application was to add new manufacturing sites to the registration of Clethodim Technical Herbicide.

Chemistry Assessment

Common Name: clethodim
 IUPAC* Chemical Name: (5*RS*)-2-{{(1*EZ*)-1-[(2*E*)-3-chloroallyloxyimino]propyl}-5-[(2*RS*)-2-(ethylthio)propyl]-3-hydroxycyclohex-2-en-1-one
 CAS† Chemical Name: 2-[1-[[[(2*E*)-3-chloro-2-propen-1-yl]oxy]imino]propyl]-5-[2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Clethodim Technical Herbicide has the following properties:

Property	Result
Colour and physical state	Brown liquid
Nominal concentration	95.5 %
Odour	Characteristic odour
Density	1.1585 g/cm ³
Vapour pressure	2.08 x 10 ⁻³ mPa (20°C)
Solubility in water	13.0 mg/L (pH 4.2)
n-Octanol/water partition coefficient	log K _{ow} = 4.14 (pH 7)

The required chemistry data for Clethodim 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 the information sufficient to amend the registration of Clethodim Technical Herbicide.

References

PMRA

Document

Number	Reference
637485	Product Identification, DACO: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9 CBI
637505	2003, Physical State, Shape, Colour And Odour Of Clethodim Agan Technical., DACO: 2.14.1, 2.14.2, 2.14.3 CBI
637506	Waiver For Not Submitting A Melting Point/Melting Range Data For Clethodim Technical Herbicide., DACO: 2.14.4 CBI
637507	2003, Boiling Point Of Clethodim Agan Technical., DACO: 2.14.5 CBI
637508	2003, Determination Of The Density Of Clethodim Agan Technical., DACO: 2.14.6 CBI
637509	2003, Thermal And Air Stability Of Clethodim Agan Technical., DACO: 2.14.13 CBI
637511	2003, Solubility Of Clethodim Agan Technical In Water And Organic Solvents., DACO: 2.14.7, 2.14.8 CBI
637512	2003, Vapour Pressure Of Clethodim Agan Technical., DACO: 2.14.9 CBI
637513	2003, Dissociation Constants In Water Of Clethodim Agan Technical. B, DACO: 2.14.10 CBI
637514	2003, Partition Coefficient (N-Octanol/Water) Of Clethodim Agan Technical., DACO: 2.14.11 CBI
637515	2003, UV/VIS Absorption Spectra Of Clethodim Agan Technical., DACO: 2.14.12 CBI
3216085	2020, 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 Clethodim 37% MUP, DACO: 2.11.1, 2.11.2, 2.11.3, 2.11.4 CBI
3216086	2020, 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 Clethodim 37% MUP, DACO: 2.11.1, 2.11.2, 2.11.3, 2.11.4 CBI
3216087	2021, 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, Enforcement Analytical Method and Submittal of Samples and for CLETHODIM 37% MUP, DACO: 2.11.1, 2.11.2, 2.11.3, 2.11.4 CBI
3216095	2019, Five Batch Analysis of Clethodim and Main Impurities in Clethodim TC, DACO: 2.12.1, 2.13.1, 2.13.2, 2.13.3, 2.13.4 CBI
3216096	2017, Five Batch Analysis of Clethodim and Main Impurities in Clethodim TC, DACO: 2.12.1, 2.13.1, 2.13.2, 2.13.3, 2.13.4 CBI
3216097	2019, Preliminary Analysis and Validation of analytical Methods for Clethodim TC, DACO: 2.12.1, 2.13.1, 2.13.2, 2.13.3, 2.13.4 CBI
3216098	2019, Preliminary Analysis and Validation of analytical Methods for Clethodim TC, DACO: 2.12.1, 2.13.1, 2.13.2, 2.13.3, 2.13.4 CBI

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