



Evaluation Report for Category B, Subcategory 1.1 Application

Application Number: 2023-5312
Application: Changes to Technical Grade Active Ingredient Product Chemistry
– New Source (Site) Same Registrant
Applicant: Gowan Company, L.L.C.
Product: Spirodiclofen Technical Miticide
Registration Number: 28050
Active ingredient (a.i.): Spirodiclofen
PMRA Document Number: 3641248

Purpose of Application

The purpose of this application was to register a new manufacturing site for Spirodiclofen Technical Miticide.

Chemistry Assessment

Common Name: Spirodiclofen
IUPAC* Chemical Name: 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl 2,2-dimethylbutanoate
CAS† Chemical Name: 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl 2,2-dimethylbutanoate

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Spirodiclofen Technical Miticide has the following properties:

Property	Result
Colour and physical state	White solid
Nominal concentration	98.2%
Odour	No characteristic odour
Density	1.249 g/cm ³ at 20°C
Vapour pressure	3×10^{-4} mPa at 20°C
pH	5.9 (1% solution)
Solubility in water	50 µg/L at pH 4

Property	Result
n-Octanol/water partition coefficient	$\log K_{ow} = 5.1$ at pH 7

The required chemistry data for Spirodiclofen Technical Miticide 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 support the registration of another manufacturing site for Spirodiclofen Technical Miticide.

References

PMRA Document Number	Reference
3507723	2022, Series 61: Product Identity and Composition for a New Source of Spirodiclofen Technical, DACO: 2.11.1,2.11.2,2.11.3,2.11.4 CBI
3507726	2023, Final Report 5-Batch Analysis of GWN-8379 in Accordance with International Regulatory Requirements, DACO: 2.13.3 CBI
3507727	2023, Confidential Attachment 5-Batch Analysis of GWN-8379 In Accordance with International Regulatory Requirements, DACO: 2.13.3 CBI
3507728	2023, Final Report Supplement 5-Batch Analysis of GWN-8379 in Accordance with International Regulatory Requirements, DACO: 2.13.3 CBI

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