



Evaluation Report for Category B, Subcategory 1.1 Application

Application Number: 2024-1024
Application: Changes to Technical Grade Active Ingredient (Product Chemistry) – New Source (site) Same Registrant
Applicant: Sumitomo Chemical Company, Limited.
Product: Clothianidin Technical Insecticide
Registration Number: 27445
Active ingredient (a.i.): Clothianidin
PMRA Document Number : 3701444

Purpose of Application

The purpose of this application was to register a new source of clothianidin for Clothianidin Technical Insecticide.

Chemistry Assessment

Common Name: clothianidin
IUPAC* Chemical Name: (E)-1-[(2-chlorothiazol-5-yl)methyl]-3-methyl-2-nitroguanidine
CAS† Chemical Name: [C(E)]-N-[(2-chloro-5-thiazolyl)methyl]-N'-methyl-N''-nitroguanidine

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Clothianidin Technical Insecticide has the following properties:

Property	Result
Colour and physical state	Off-white powder
Nominal concentration	97.5 %
Odour	Odourless
Density	1.61 g/cm ³ at 20°C
Vapour pressure	1.3 x 10 ⁻¹⁰ Pa at 20°C
pH	6.24 (1% suspension)
Solubility in water	0.327 g/L
n-Octanol/water partition coefficient	log K _{ow} = 0.7

The required chemistry data for Clothianidin Technical Insecticide 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 the new source of clothianidin for Clothianidin Technical Insecticide.

Additional Information Being Requested

Since this source of the technical product is manufactured only at pilot-scale before registration, five-batch data representing commercial-scale production at the approved manufacturing site will be required as post-market information after registration.

References

PMRA

Document

Number

Reference

3565131	2022, Description of Materials Used to Produce Clothianidin Technical Grade Manufacturing Process to Produce Clothianidin Technical, DACO: 2.11,2.11.1, 2.11.2,2.11.3,2.11.4 CBI
3565132	2022, Supplemental Report: Description of Materials Used to Produce Clothianidin Technical Grade Manufacturing Process to Produce Clothianidin Technical, DACO: 2.11,2.11.1,2.11.2,2.11.3,2.11.4 CBI
3565135	2019, Method Validation for the Determination of Active Ingredient in Clothianidin Technical Grade, DACO: 2.13.1
3565138	2019, Method Validation for the Determination of Impurities in Clothianidin Technical Grade, DACO: 2.13.1 CBI
3565141	2019, 5-Batch Analysis for Active Ingredient and Impurity Content in Clothianidin Technical Grade, DACO: 2.13.3
3565142	2019, 5-Batch Analysis for Active Ingredient and Impurity Content in Clothianidin Technical Grade, DACO: 2.13.3 CBI
3565144	2019, 5-Batch Analysis for Impurities in Clothianidin Technical Grade, DACO: 2.13.3 CBI
3565146	2024, Enforcement Analytical Methods of Residual Solvents in Clothianidin Technical Grade, DACO: 2.13.1 CBI
3565148	2024, Batch Analysis of Clothianidin Technical Grade for Residual Solvents, DACO: 2.13.3,2.13.4 CBI

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