

Evaluation Report for Category L, Subcategory 1.1 Application

Application Number: 2021-5908
Application: Submissions Subject to the Protection of Proprietary Interests in Pesticide Data (PIIP) Policy – Equivalency/Data Compensation
Product: Chlorantraniliprole Technical Insecticide
Registration Number: 34851
Active ingredient (a.i.): Chlorantraniliprole
PMRA Document Number: 3414076

Purpose of Application

The purpose of this application was to register Chlorantraniliprole Technical Insecticide, a new source of chlorantraniliprole, based on a registered precedent.

Chemistry Assessment

Common Name: Chlorantraniliprole
IUPAC* Chemical Name: 3-bromo-4'-chloro-1-(3-chloro-2-pyridyl)-2'-methyl-6'-(methylcarbamoyl)-1*H*-pyrazole-5-carboxanilide
CAS† Chemical Name: 3-bromo-*N*-[4-chloro-2-methyl-6-[(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1*H*-pyrazole-5-carboxamide

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Chlorantraniliprole Technical Insecticide has the following properties:

Property	Result
Colour and physical state	White solid
Nominal concentration	97%
Odour	Odourless
Density	1.0-1.1 g/mL
Vapour pressure	2.8×10^{-24} Pa at 20°C (extrapolated)
pH	4-5
Solubility in water	1.40 µg/mL

Property	Result
n-Octanol/water partition coefficient	$\log K_{ow} = 2.73$

The required chemistry data for Chlorantraniliprole 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 sufficient to support the registration of Chlorantraniliprole Technical Insecticide.

Additional Information Being Requested

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

References

PMRA Document Number	References
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3285097	2020, Chlorantraniliprole Technical grade Manufacturing information-Size and date of batches-Innovative, DACO: 2.13.3 CBI
3285098	2020, Method validations and 5 batch analysis of Chlorantraniliprole technical material-Basic, DACO: 2.13.1,2.13.2,2.13.3,2.13.4 CBI
3285099	2019, Method validations and 5 batch analysis of Chlorantraniliprole technical material Amendment no. 1, DACO: 2.13.1,2.13.2 CBI
3285100	2019, Method validations and 5 batch analysis of Chlorantraniliprole technical material Amendment no. 2, DACO: 2.13.1,2.13.2 CBI
3285101	2020, Chlorantraniliprole Technical grade Manufacturing information-Size and date of batches-basic, DACO: 2.13.3 CBI
3285102	2020, [Privacy Removed].ITC-B_final - Manufacturing Process and Discussion of Formation of Impurities for Chlorantraniliprole Technical, DACO: 2.11.1,2.11.3,2.11.4,2.4,2.5,2.6,2.7,2.8,2.9 CBI
3285103	2020, [Privacy Removed].ITC-I_final - Manufacturing Process and Discussion of Formation of Impurities for Chlorantraniliprole Technical, DACO: 2.11.1,2.11.3,2.11.4,2.4,2.5,2.6,2.7,2.8,2.9 CBI
3285104	2019, Appearance test on Chlorantraniliprole (Technical material and Pure active ingredient), DACO: 2.14.1,2.14.2,2.14.3 CBI
3285105	2020, Solubility in organic solvents test on chlorantraniliprole (Technical material), DACO: 2.14.8 CBI
3285106	2020, Melting point test by Differential Scanning Calorimetry (DSC) on Chlorantraniliprole (Technical material), DACO: 2.14.4 CBI
3285107	2020, Vapour pressure test on Chlorantraniliprole (Pure active ingredient), DACO: 2.14.9 CBI
3285108	2020, Chlorantraniliprole Stability to Normal and Elevated Temperatures and Metals and Metal ions, DACO: 2.14.13 CBI
3285110	2020, Determination of Water Solubility of Pure and Technical Chlorantraniliprole, DACO: 2.14.7 CBI
3285111	2020, Relative Density Determination of Chlorantraniliprole technical, DACO: 2.14.6 CBI
3285112	2020, Partition coefficient (n-octanol/water) determination of Chlorantraniliprole, DACO: 2.14.11 CBI
3285113	2020, UV-VIS light absorption of pure Chlorantraniliprole material, DACO: 2.14.12 CBI
3285114	2020, pH determination of Chlorantraniliprole technical material, DACO: 2.14.15,830.7000 CBI
3324999	2022, Chemistry-Part 2-2.1-2.3, 2.11.2, 2.12.1, 2.14.5, 2.14.10-CTP-22feb2022, DACO: 2.1,2.11.2,2.12.1,2.14.10,2.14.5,2.2,2.3,2.3.1
3325000	2022, [CBI Removed] (Batch No. 644-021-03) NMR Spectra, DACO: 2.13.2 CBI
3325001	2022, [CBI Removed] (Batch No. 632-040-00) NMR Spectra, DACO: 2.13.2 CBI

3325002 2022, [CBI Removed] (Batch No. 632-027-00) NMR Spectra, DACO: 2.13.2 CBI
3325003 2022, [CBI Removed] (Batch No. 613-030-00) NMR Spectra, DACO: 2.13.2 CBI
3325004 2022, [CBI Removed] NMR Spectra, DACO: 2.13.2 CBI
3325005 2022, [CBI Removed] (Batch No. 613-020-00) NMR Spectra, DACO: 2.13.2 CBI
3325006 2022, [CBI Removed] (Batch No. 644-003-00) NMR Spectra, DACO: 2.13.2 CBI
3325007 2022, [CBI Removed] Batch No. 603-039-00) NMR Spectra, DACO: 2.13.2 CBI
3325008 2022, [CBI Removed] (Batch No. 603-038-00) NMR Spectra, DACO: 2.13.2 CBI
3325009 2022, [CBI Removed] (Batch No. 632-087-00) NMR Spectra, DACO: 2.13.2 CBI
3325010 2022, [CBI Removed] (Batch No. 632-060-00) NMR Spectra, DACO: 2.13.2 CBI
3325011 2022, [CBI Removed] (Batch No. 644-083-00) NMR Spectra, DACO: 2.13.2 CBI
3325012 2022, [CBI Removed] (Batch No. 632-090-00) NMR Spectra, DACO: 2.13.2 CBI
3325013 2022, [CBI Removed] (Batch No. 632-088-00) NMR Spectra, DACO: 2.13.2 CBI
3325014 2022, [CBI Removed] (Batch No. 632-089-00) NMR Spectra, DACO: 2.13.2 CBI
3406098 2020, Manufacturing Process for Chlorantraniliprole Technical Insecticide,
DACO: 2.11,2.11.1,2.11.2,2.11.3,2.11.4 CBI

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