

Evaluation Report for Category L, Subcategory 1.1 Application

Application Number: 2023-0164
Application: Application Subject to Protection of Proprietary Interests in Pesticide Data (PIIP) Policy – Equivalency/Data Compensation Assessment
Product: Prothioconazole Technical
Registration Number: 35197
Active ingredient (a.i.): Prothioconazole
PMRA Document Number: 3555674

Purpose of Application

The purpose of this application was to register Prothioconazole Technical, a new source of the active ingredient prothioconazole, based on a registered precedent product.

Chemistry Assessment

Common Name: Prothioconazole
IUPAC* Chemical Name: (RS)-2-[2-(1-chlorocyclopropyl)-3-(2-chlorophenyl)-2-hydroxypropyl]-2,4-dihydro-1,2,4-triazole-3-thione
CAS† Chemical Name: 2-[2-(1-chlorocyclopropyl)-3-(2-chlorophenyl)-2-hydroxypropyl]-2,4-dihydro-3H-1,2,4-triazole-3-thione

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Prothioconazole Technical has the following properties:

| Property | Result |
|---------------------------------------|---------------------------------------|
| Colour and physical state | White solid |
| Nominal concentration | 98.68% |
| Odour | Characteristic odour |
| Density | 1.4098 g/cm ³ at 20.0°C |
| Vapour pressure | 1.99 × 10 ⁻⁶ mPa at 20 °C |
| pH | 5.70 |
| Solubility in water | 14.1 mg/L (pH 6.26) |
| n-Octanol/water partition coefficient | log K _{ow} = 4.015 (pH 3.32) |

The required chemistry data for Prothioconazole Technical 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 Prothioconazole Technical.

References

| PMRA Document Number | Reference |
|-----------------------------|---|
| 3426266 | 2020, 2.13.3 Batch Analysis, DACO: 2.13,2.13.2,2.13.3 CBI |
| 3426268 | 2020, 2.14 Flammability, DACO: 2.14 CBI |
| 3426269 | 2020, 2.14.1 to 2.14.3 Physical State, Odour and Colour, DACO: 2.14.1,2.14.2,2.14.3 CBI |
| 3426270 | 2022, 2.14.10 Dissociation Constant, DACO: 2.14.10 CBI |
| 3426271 | 2020, 2.14.11 OctanolWater Partition Coefficient, DACO: 2.14.11 CBI |
| 3426272 | 2022, 2.14.13 Stability Data, DACO: 2.14.13,2.14.14 CBI |
| 3426273 | 2020, 2.14.15 pH, DACO: 2.14.15,830.7000 CBI |
| 3426274 | 2020, 2.14.12 UV-Visible Adsorption Spectra, DACO: 2.14.12 CBI |
| 3426275 | 2020, 2.14.4 Melting Point or Range, DACO: 2.14.4 CBI |
| 3426277 | 2020, 2.14.6 Relative Density, DACO: 2.14.6 CBI |
| 3426278 | 2020, 2.14.7 & 2.14.8 Water & Solvent Solubility, DACO: 2.14.7,2.14.8 CBI |
| 3426279 | 2020, 2.14.9 Vapour Pressure, DACO: 2.14.9 CBI |
| 3426280 | 2020, 2.16 Corrosiveness, DACO: 2.16 CBI |
| 3426283 | 2023, 2.3 to 2.11.4 Chemical Composition, Manufacturing Summary, Starting Materials and Impurities, DACO: 2.11,2.11.1,2.11.2,2.11.3,2.11.4, 2.3,2.3.1,2.4,2.5,2.6,2.7,2.8,2.9 CBI |
| 3486712 | 2023, RF.17976.003.094.23 - ENG, DACO: 2.13.4 CBI |

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