

## Evaluation Report for Category L, Subcategory 1.1 Application

**Application Number:** 2023-0824  
**Application:** Application Subject to the Protection of Proprietary Interests in Pesticide Data (PIIP) Policy - Equivalency/Data Compensation Assessment  
**Product:** ZS Prothioconazole Technical  
**Registration Number:** 35220  
**Active ingredient (a.i.):** Prothioconazole  
**PMRA Document Number:** 3560616

### Purpose of Application

The purpose of this application was to register a new source of prothioconazole, ZS Prothioconazole Technical, 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

ZS Prothioconazole Technical has the following properties:

Property	Result
Colour and physical state	White solid
Nominal concentration	98.4%
Odour	Characteristic odour
Density	1.38 – 1.45 g/mL at 20°C
Vapour pressure	$4.91 \times 10^{-4}$ mPa at 25 °C
pH	5.76
Solubility in water	7 mg/L (pH 3.9)

Property	Result
n-Octanol/water partition coefficient	log $K_{ow}$ = 3.960 (pH 6.97)

The required chemistry data for ZS 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 ZS Prothioconazole Technical.

## References

### PMRA

#### Document

Number	Reference
3441105	2018, Manufacturing Process of Prothioconazole Technical Grade Active Substance, DACO: 2.11,2.11.1,2.11.2,2.11.3,2.11.4 CBI
3441106	2018, Preliminary Analysis, Enforcement Analytical Method & Qualitative and Quantitative Profile of the test substance Prothioconazole Technical (Five Batch Analysis), DACO: 2.13,2.13.1,2.13.2,2.13.3,2.13.4 CBI
3441107	2018, Preliminary Analysis, Enforcement Analytical Method & Qualitative and Quantitative Profile of the test substance Prothioconazole Technical (Five Batch Analysis), DACO: 2.13,2.13.1,2.13.2,2.13.3,2.13.4 CBI
3441108	2019, Preliminary Analysis, Enforcement Analytical Method & Qualitative and Quantitative Profile of the test substance Prothioconazole Technical (Five Batch Analysis), DACO: 2.13,2.13.1,2.13.2,2.13.3,2.13.4 CBI
3441109	2018, Physical State, Appearance, Color, and Odor of Prothioconazole Technical, DACO: 2.14.1,2.14.2,2.14.3
3441110	2017, Melting point and range of Prothioconazole Technical, DACO: 2.14.4
3441111	2023, Zhongshan Prothioconazole Technical Physical and Chemical Property Waiver Requests, DACO: 2.14.16,2.14.5
3441112	2018, Determination of the Relative Density of Prothioconazole Technical, DACO: 2.14.6
3441113	2017, Solubility in water and organic solvents (N-hexane and acetone) of Prothioconazole Technical, DACO: 2.14.7,2.14.8
3441114	2017, Vapor pressure of Prothioconazole Technical, DACO: 2.14.9
3441115	2019, Dissociation constant in water of Prothioconazole Technical, DACO: 2.14.10
3441116	2017, Partition coefficient (n-octanol / water) Prothioconazole Technical, DACO: 2.14.11
3441117	2019, UV-VIS Absorption Spectra of Prothioconazole Technical, DACO: 2.14.12
3441118	2018, Stability of Prothioconazole Technical to Normal and Elevated Temperatures, Metals and Metal Ions, DACO: 2.14.13
3441119	2019, Accelerated Storage Stability and Corrosion Characteristics of Prothioconazole Technical, DACO: 2.14.14
3441120	2018, Determination of the pH value of an aqueous solution of Prothioconazole Technical, DACO: 2.14.15,830.7000
3489811	2023, Analytical method validation and content of [CBI REMOVED] in Prothioconazole Technical, DACO: 2.13.4 CBI

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