

Evaluation Report for Category B, Subcategory 1.1 Application

Application Number: 2018-2547
Application: New/Changes to Integrated System Product (Product Chemistry) - New source (site), same registrant
Product: Preventol IT 14
Registration Number: 31757
Active ingredients (a.i.): 2-Methyl-4-isothiazolin-3-one (ISL) and 5-Chloro-2-methyl-4-isothiazolin-3-one (IST)
PMRA Document Number : 3014209

Purpose of Application

The purpose of this application was to register a new source for the integrated system product, Preventol IT 14, an antimicrobial material preservative.

Chemistry Assessment

Common Name: 5-Chloro-2-methyl-4-isothiazolin-3-one
 2-Methyl-4-isothiazolin-3-one
IUPAC* Chemical Names: 5-chloro-2-methyl-1,2-thiazol-3(2*H*)-one
 2-methyl-1,2-thiazol-3(2*H*)-one
CAS† Chemical Name: 5-chloro-2-methyl-3(2*H*)-isothiazolone
 2-methyl-3(2*H*)-isothiazolone

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Preventol IT 14 has the following properties:

Property	Result
Colour and physical state	Light amber liquid
Nominal concentration	5-Chloro-2-methyl-4-isothiazolin-3-one....11.14% 2-Methyl-4-isothiazolin-3-one.... 3.56%
Odour	Faint
Density	1.302 g/mL
Vapour pressure	2.4 Pa for 5-Chloro-2-methyl-4-isothiazolin-3-one 0.083 Pa for 2-Methyl-4-isothiazolin-3-one
pH	4.12 in 1% solution

Property	Result
Solubility in water	Active ingredients are miscible in water.
n-Octanol/water partition coefficient	Log K _{ow} = 0.401 at 24°C for 5-Chloro-2-methyl-4-isothiazolin-3 one Log K _{ow} = - 0.486 at 24°C for 2-Methyl-4-isothiazolin-3-one

The required chemistry data for Preventol IT 14 have been provided, reviewed, and found to be acceptable.

Value, Health and Environmental Assessments

Value, health and environmental 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 register a new source for Preventol IT 14.

References

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2442156	2014, Chemistry-2.11-3-CMITMIT-14 Raw Material Specifications-22july2014, DACO: 2.11.3 CBI
2442157	2009, EXP 115-14 Storage Stability and Corrosion Characteristics, DACO: 2.14.14 CBI
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2893935	2014, Amendment to Harlan Study Number D56345 (revised report [PRIVACY INFO REMOVED] 23 December 2014) - Summary of analytical data including additional calculation of [CBI REMOVED], DACO: 2.13.3 CBI

PMRA Document Number	Reference
3004219	2015, CMIT/MIT [CBI REMOVED]: Validation of Analytical Methods for the Determination of the Active Substances and Production Related Impurities, DACO: 2.13.1 CBI
3009638	2019, Preventol IT 14Supplement to the 5-Batch Analysis Report:, DACO: 2.13.3 CBI

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