

Evaluation Report for Category B, Subcategory 1.1, 1.3 Application

Application Number: 2020-2150
Application: New TGAI (Product Chemistry) - New source (site), same registrant; Specifications
Product: PREVENTOL IT 14 MV
Registration Number: 34343
Active ingredients (a.i.): 2-methyl-4-isothiazolin-3-one and 5-chloro-2-methyl-4-isothiazolin-3-one
PMRA Document Number : 3279180

Purpose of Application

The purpose of the application was to register PREVENTOL IT 14 MV, a new source of technical grade active ingredients 2-methyl-4-isothiazolin-3-one [ISL] and 5-chloro-2-methyl-4-isothiazolin-3-one [IST].

Chemistry Assessment

Common Name: 5-Chloro-2-methyl-4-isothiazolin-3-one
 2-Methyl-4-isothiazolin-3-one
IUPAC* Chemical Name: 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 MV 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 MV have been provided, reviewed, and found to be acceptable.

Health Assessments

The health risk profile of the technical active ingredient is not expected to be significantly altered by the addition of this new source.

Dietary and occupational/residential exposure assessments were not required for this application.

Value and Environmental Assessments

Value 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 support the registration of PREVENTOL IT 14 MV.

References

PMRA Document Number	Reference
3126714	2015, CMIT/MIT [CBI Removed]: 5-Batch Analysis, DACO: 2.13.1, 2.13.2, 2.13.3,2.13.4,2.14.12 CBI
3126717	2020, Preventol IT 14 MV Product Chemistry Supplement to Support PMRA Registration, DACO: 2.1, 2.11.1, 2.11.2, 2.11.3, 2.11.4, 2.12.1, 2.2,2.3, 2.3.1, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9 CBI
3244901	2021, Discussion of Formation of Impurities, DACO: 2.11.4 CBI
3244902	2021, Detailed Manufacturing Process Description, DACO: 2.11.3 CBI

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