Health Canada Santé Canada

Evaluation Report for Category B, Subcategories 2.1, 2.3, 2.4, 3.12, 3.14 Application

Application Number: 2019-0665
Application: New EP Product Chemistry -Guarantee, Identity of Formulants, Proportion of Formulants
New Product Labels -New Site or Host, Classifications
Product: PondPro Algaecide Cyanobactericide
Registration Number: 33957
Active ingredient (a.i.): Copper, present as copper sulfate pentahydrate
PMRA Document Number: 3155644

Purpose of Application

The purpose of this application was to register a new domestic-class product containing copper, present as copper sulfate pentahydrate, for the control of algae and cyanobacteria (blue-green algae) in non-potable water tanks, ornamental ponds, water gardens and decorative fountains.

Chemistry Assessment

PondPro Algaecide Cyanobactericide is formulated as a solution containing copper, present as copper sulfate pentahydrate at 2.73%. This end-use product has a density of 1.085–1.135 g/mL and pH of 0.5–1.0. The required chemistry data for PondPro Algaecide Cyanobactericide have been provided, reviewed and found to be acceptable.

Health Assessments

PondPro Algaecide Cyanobactericide is of low acute toxicity by the oral and dermal routes, is corrosive or extremely irritating to the eyes, is extremely irritating to the skin, and is not a dermal sensitizer.

Exposure to individuals handling PondPro Algaecide Cyanobactericide is not expected to result in health risks of concern when the product is used according to label directions.

Bystander and residential exposure is not expected to result in health risks of concern when the product is used according to label directions.

A dietary exposure assessment was not required for this application.

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Environmental Assessment

Use of PondPro Algaecide Cyanobactericide for the control of algae and cyanobacteria in ornamental ponds, non-potable water tanks, water gardens, and decorative fountains does not pose any risk to the environment when used according to the label.

Value Assessment

Value information and additional rationales were submitted to confirm the cyanobactericidal capabilities of PondPro Algaecide Cyanobactericide. Support for the algaecide claims was confirmed, as the application rate falls within the accepted range found within the Value Guidelines for New Antimicrobial Pest Control Products and Label Amendments (0.2-1.0ppm ionic copper in the pool) for control of algae within pools. Therefore PondPro Algaecide Cyanobactericide has been found to have acceptable value.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found it sufficient to support the registration of PondPro Algaecide Cyanobactericide.

References

PMRA Document Number	Reference
2831380	2016, Method Validation for the Assay Determination of Copper in OCION PX10 by ICP-OES, DACO: 2.0,2.13.1,2.13.2 CBI
2831383	2016, Product Chemistry, Accelerated Storage Stability, Corrosion Characteristics Testing of OCION PX10, DACO: 2.14.14, 2.14.2, 3.5.1, 3.5.10, 3.5.14, 3.5.2, 3.5.5, 5.13 CBI
2991809	2019, Determination of Corrosion Characteristics of OCION PX10, DACO: 10.3.2, 3.5.14 CBI
2992685	2019, DACO 3.2.2_Formulation Process_PONDPRO_May2019, DACO: 3.2.2 CBI
2992686	2019, DACO 3_PONDPRO_May2019, DACO: 3.0,3.1, 3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.2, 3.2.1, 3.2.2, 3.3.1, 3.4, 3.4.1, 3.5, 3.5.1, 3.5.10, 3.5.11, 3.5.12, 3.5.13, 3.5.14, 3.5.15, 3.5.2, 3.5.3, 3.5.4, 3.5.5, 3.5.6, 3.5.7,3.5.8,3.5.9 CBI
2992689	2019, PONDPRO_Chemistry_LabResults, DACO: 3.5,3.5.6,3.5.7,3.5.9,3.7 CBI
2991762	1989, Acute Oral Toxicity Study of SCI-62 in Rats, DACO: 4.6.1
2991763	1989, Acute Dermal Toxicity Study of SCI-62 in Rabbits, DACO: 4.6.2
2991764	1991, Primary Dermal Irritation Study of EarthTec/Pristine Blue in Rabbits (EPA Guidelines), DACO: 4.6.5
2992687	2019, DACO 4.6_PONDPRO_May2019, DACO: 4.6,4.6.1,4.6.2,4.6.3,4.6.4,4.6.5,4.6.6,4.6.8
2992688	2019, DACO 5_PONDPRO_May2019, DACO: 5.1,5.2
2831390	2017, OCION PX10 Efficacy: Blue-green Algae - Synechococcus, DACO: 10.2,10.2.2,10.2.3,10.2.3.1,10.2.3.2
2831391	2017, OCION PX10 Efficacy: Blue-green Algae - Chroococcus, DACO: 10.2,10.2.2,10.2.3,10.2.3.1,10.2.3.2
3050210	Kyla J. Iwinski, Alyssa J. Calomeni, Tyler D. Geer, John H Rodgers Jr., 2016, Cellular and Aqueous Microsystin-LR following laboratory exposures of *Microcystis aeruginosa* to copper algaecides, DACO: 10.2.3,10.2.3.2(F)
3050211	Kyla J. Iwinski, 2016, Release and degradation of microcystin-LR following exposures of microcystis to copper-based algaecides, DACO: 10.2.3,10.2.3.2(F),10.2.3.4(A),10.2.3.4(E)

PMRA Document Number	Reference
3050213	Kinley C M et al, 2018, Microcystin-LR degradation following copper based algaecide exposures, DACO: 10.2.3,10.2.3.2(F),10.2.3.4,10.2.3.4(E)
3050214	Kinley CM et al, 2017, Cell density dependence of *Microcystis aeruginosa* responses to copper algaecide concentrations: Implications for microcystin-LR release, DACO: 10.2,10.2.3,10.2.3.2(F)
3050215	Iwinski K J et al., 2017, Influence of CuSO4 and chelated copper algaecide exposures on biodegradation of microcystin-lR, DACO: 10.2,10.2.3,10.2.3.2(F),10.2.3.4(E)