



Evaluation Report for Category B, Subcategory 2.1, 2.3, 2.4 Application

Application Number: 2011-0978
Application: B.2.1 (Product chemistry – guarantee)
B.2.3 (Product chemistry – identity of formulants)
B.2.4 (Product chemistry – proportion of formulants)
Product: Mosquito-Less Ready-to-Use
Registration Number: 30682
Active ingredients (a.i.): Garlic oil
PMRA Document Number : 2220722

Purpose of Application

The purpose of this application was to register a domestic-class products, Mosquito-Less Ready-to-Use (0.1% garlic oil), for outdoor application at small areas including cottages, homes, gardens, pools, tents, RVs and boats to repel mosquitos.

Chemistry Assessment

Mosquito-Less Ready-to-Use is a solution containing the active ingredient garlic oil at a nominal concentration of 0.04%. This product has a density of 1.0 – 1.01 g/mL and pH of 6.5. The chemistry requirements for Mosquito-Less Ready-to-Use have been completed.

Health Assessments

Mosquito-Less Ready-To-Use is expected to have low acute toxicity by both the oral and dermal route, may be a skin and eye irritant, and possible dermal sensitizer.

The current label statements for Mosquito-Less Ready-To-Use are considered adequate to address any potential risk due to the domestic user. Occupational exposure when applying Mosquito-Less Ready-To-Use is not expected to result in unacceptable risk when the product is used according to label directions.

Environmental Assessment

An environmental assessment was not required for this application.

Value Assessment

One study consisting of three trials conducted in distinct locations was reviewed in support of the area repellent claims against mosquitoes for the domestic-class products, Mosquito-Less

(1.25% garlic oil) and Mosquito-Less Ready-to-Use (0.1% garlic oil), and the commercial-class product, Mosquito-Less Commercial (1.25% garlic oil). This study was conducted in Eastern Ontario in 2012, and tested Mosquito-Less in three environments (rural, semi-urban, and urban). This study compared mosquito trapping counts using CDC light traps baited with CO₂ in untreated and treated sites at each location. A statistically significant repellent effect was observed for three days after application, with repellency ranging from 85.3 to 92.4% on the day of application, 77.6 to 81.5% on the day following application, and 50.0 to 63.3% on the third day. By the fourth day, a statistically significant repellent effect was no longer observed in two of the three treated sites, with repellency ranging from 3.7 to 26.9% for all three sites.

Conclusion

The PMRA has completed an assessment of the available information and is able to support the full registration of Mosquito-Less Ready-to-Use.

References

- 2021640 2011, Chemistry Requirements for Registration of End-Use Product, DACO: 3.1.1,3.1.2,3.1.3,3.1.4,3.2,3.2.1,3.2.2,3.2.3,3.3.1,3.4.1,3.4.2,3.5,3.5.1,3.5.10,3.5.11,3.5.12,3.5.13,3.5.14,3.5.2,3.5.3,3.5.4,3.5.5,3.5.6,3.5.7,3.5.8,3.5.9 CBI
- 2205763 2012, Report on the Efficacy of Mosquito-Less (Garlic Oil 1.25%) in reducing the numbers of nuisance mosquitoes in 3 different environments, Semi-Urban, Rural and Urban., DACO: 10.2.3.3(C)
- 2205764 2012, Trial 1-Otty Lake Development-03july2012, DACO: 10.2.3.3(C)
- 2205765 2012, Trial 2 - Rural Setting- Blakeney-03july2012, DACO: 10.2.3.3(C)
- 2205766 2012, Trial 3 - Urban Setting - Almonte-03july2012, DACO: 10.2.3.3(C)

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