

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

Application Number: 2008-0754
Application: B.2.1 (New/Changes to product chemistry - guarantee)
B.2.3 (New/Changes to product chemistry – identity of formulants)
B.2.4 (New/Changes to product chemistry – proportion of formulants)
Product: Gourmet Liquid Ant Bait Dot II
Registration Number: 29345
Active ingredients (a.i.): disodium octaborate tetrahydrate (BOC)
PMRA Document Number: 1763189

Purpose of Application

Innovative Pest Control Products has submitted an application to register an end-use product, Gourmet Liquid Ant Bait DOT II, containing the active ingredient disodium octaborate tetrahydrate for commercial use.

Chemistry Assessment

Gourmet Liquid Ant Bait DOT II is a solution containing the active ingredient disodium octaborate tetrahydrate at a minimum concentration of 1.0%. This product has a density of 1.17 g/mL and pH of 7.99. The product contains the formulation preservative sodium benzoate at a minimum concentration of 0.25%. The chemistry requirements for Gourmet Liquid Ant Bait DOT II have been completed.

Health Assessments

Gourmet Liquid Ant Bait DOT II is considered to be of low acute toxicity via the oral, dermal and inhalation routes. It is minimally irritating to the eyes and is not considered to be a dermal irritant or potential skin sensitizer.

A health assessment has been conducted for Gourmet Liquid Ant Bait DOT II. It is not expected that exposure to applicators will increase over the exposure from currently registered products containing disodium octaborate tetrahydrate active ingredient.

Environmental Assessment

No significant environmental exposure is anticipated based on the use pattern for this product.

Value Assessment

To demonstrate the efficacy of Gourmet Liquid Ant Bait DOT and Gourmet Liquid Ant Bait DOT II, three study reports were submitted on cockroaches and seven on ants. The results showed that disodium octaborate tetrahydrate was effective in controlling cockroaches, ants and carpenter ants, and that the minimum effective concentration of disodium octaborate tetrahydrate was 1% for cockroaches and carpenter ants and 0.5% for other ant species. From a value and sustainability perspective, the use of Gourmet Liquid Ant Bait DOT II is acceptable for the control of cockroaches, ants and carpenter ants.

Conclusion

The PMRA has completed an assessment of available information and has found the information sufficient to support the registration of the end-use product Gourmet Liquid Ant Bait DOT II for commercial use.

References

PMRA

Document Number

Reference

- 1556716 2006, Physical and Chemical Characteristics: color, odor, physical state, oxidation/reduction, pH, viscosity and density, 13197, DACO: 3.5.1,3.5.2,3.5.3,3.5.6,3.5.7,3.5.8,3.5.9 CBI
- 1556717 2007, Description of the Starting Materials, DACO: 3.2.1 CBI
- 1556718 2007, Method of Analysis for DOT, DACO: 3.4.1 CBI
- 1556719 2003, Method of Analysis for DOT 2, A-2, DACO: 3.4.1 CBI
- 1556720 2006, Storage Stability and Corrosion Characteristics. Physical and Chemical Characteristics: color, odor, physical state, oxidation/reduction, pH, viscosity and density, 13196, DACO: 3.5.11,3.5.12,3.5.13,3.5.15,3.5.4,3.5.5 CBI
- 1577137 2007, DACOs 3.1.1-4 Category B Identity of Formulants (B2.3), DACO: 3.1.1, 3.1.2,3.1.3,3.1.4 CBI
- 1577138 2008, Chemistry Storage Stability and Corrosion Characteristics, A-2, DACO: 3.5.10,3.5.14 CBI
- 1730244 2007, Innovative Pest Control Products Manufacturing & Packaging Protocols , Daco: 3.2.2 CBI
1556722. 2004, Evaluation of German Cockroach Mortality when Exposed to Liquid and Gel Formulations of Gourmet Ant Bait, MRID: NA, DACO: 10.2.3.2(C)
1556724. Gore, J.C. *et al.*, 2004, Water Solutions of Boric Acid and Sugar for Management of German Cockroach Populations in Livestock Production Systems, *J. Econ. Entomol.* 97(2): 715-720 (2004), MRID: NA, DACO: 10.2.3.2(C)
1556726. 2005, Efficacy Of Liquid Ant Bait Stations In Laboratory Tests For Control Of Fire Ants And Carpenter Ants, Daco: 10.2.3.2(C)
1556727. Klotz, J.H. *et al*, 2005, Toxicity and Repellency of Borate-Sucrose Water Baits to Argentine Ants (Hymenoptera: Formicidae), *J. Econ. Entomol.* 93(4): 1256-1258 (2000), MRID: NA, DACO: 10.2.3.2(C)

1556728. Hooper-Buii, L.M. *et al.*, 2000, Oral Toxicity of Abamectin, Boric Acid, Fipronil, and Hydramethylnon to Laboratory Colonies of Argentine Ants (Hymenoptera: Formicidae), *J. Econ. Entomol.* 93(3): 858-864 (2000), DACO: 10.2.3.2(C)
1556729. Rust, M.K. *et al.*, 2004, Delayed Toxicity as a Critical Factor in the Efficacy of Aqueous Baits for Controlling Argentine Ants (Hymenoptera: Formicidae), *J. Econ. Entomol.* 97(3): 1017-1024 (2004), MRID: NA, DACO: 10.2.3.2(C)
1556730. Ulloa-Chaco, P. *et al.*, 2003, Effects of Boric Acid, Fipronil, Hydramethylnon, and Diflubenzuron Baits on Colonies of Ghost Ants (Hymenoptera: Formicidae), *J. Econ. Entomol.* 96(3): 856-862(2 003), DACO: 10.2.3.2(C)
1556731. Stanley. M.C. and Robinson, W.A., 2007, Relative Attractiveness of Baits to *Paratrechina longicornis* (Hymenoptera: Formicidae), *J. Econ. Entomol.* 100(2): 509-516 (2007), DACO: 10.2.3.2(C)
1556732. Greenberg, L., *et al.*, 2006, Liquid Borate Bait For Control Of The Argentine Ant, *Linepithema Humile*, In Organic Citrus (Hymenoptera: Formicidae), *Florida Entomologist* 89(4), December 2006, DACO: 10.2.3.2(C)
1689167. 2006, Evaluation of 2 bait formulations by Innovative Pest Products when exposed to a mixed population of American cockroaches (*Periplaneta americana*), DACO: 10.2.3.2(C)

ISSN: 1911-8082

© Her Majesty the Queen in Right of Canada, represented by the Minister of Public Works and Government Services
Canada 2010

All rights reserved. No part of this information (publication or product) may be reproduced or transmitted in any form or by any means, electronic, mechanical photocopying, recording or otherwise, or stored in a retrieval system, without prior written permission of the Minister of Public Works and Government Services Canada, Ottawa, Ontario K1A 0S5.