



Evaluation Report for Category B, Subcategory 2.6 Application

Application Number: 2018-2550
Application: New EP Product Chemistry-New Combination of Technical Grade Active Ingredients
Product: Brigade Bird Repellent Granular
Registration Number: 34098
Active ingredients (a.i.): Crushed garlic, methyl anthranilate
PMRA Document Number: 3212387

Purpose of Application

The purpose of this application was to register Brigade Bird Repellent Granular, a new end-use product to repel various species of birds from various outdoor sites and from crops.

Chemistry Assessment

Brigade Bird Repellent Granular is formulated as a solid containing methyl anthranilate at 14.75% (when packed) and crushed garlic at 14.0%. This end-use product has a density of 0.630 – 0.644 g/cm³ and pH of 10.16 (1% solution). The required chemistry data for Brigade Bird Repellent Granular have been provided, reviewed and found to be acceptable

Health Assessments

Brigade Bird Repellent Granular is of low acute toxicity by both the oral and dermal routes, and are skin, eye and respiratory irritants, as well as potential sensitizers. Individuals who are sensitive or allergic to garlic should avoid handling the product.

Occupational exposure is acceptable when Brigade Bird Repellent Granular is used according to label directions. Precautionary statements, personal protective equipment and the directions for use on the product label, aimed at mitigating user exposure, are adequate to protect individuals from any potential risk due to occupational exposure.

Bystander exposure will not result in health risks of concern when the product is used according to label directions. Brigade Bird Repellent Granular is not permitted for use around residential properties. Consequently, the risk to bystanders and individuals in residential areas is acceptable.

A dietary exposure assessment was not required, as Brigade Bird Repellent Granular is not applied directly to crops.

Environmental Assessment

The use of Brigade Bird Repellent Granular is acceptable from an environmental perspective when used according to label directions.

Value Assessment

The submitted value information supported the use of Brigade Bird Repellent Granular to repel sparrows, grackles, European starlings, robins, cardinals, blackbirds and blue jays on root and tuber vegetables, pome fruit, stone fruit, berries and small fruits, and cereal grains in and around structures for up to three months.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found it sufficient to register Brigade Bird Repellent Granular.

References

A. List of Studies/Information Submitted by Registrant

PMRA Document Number	Reference
2894003	2018, The Formulation Process of Brigade Bird Repellent Granular, DACO: 3.2.1, 3.2.2 CBI
2894006	2018, The Colour of Brigade Bird Repellent Granular, DACO: 3.5.1 CBI
2894008	2018, Flammability of Brigade Bird Repellent Granular, DACO: 3.5.11 CBI
2894009	2018, Explodability of Brigade Bird Repellent Granular, DACO: 3.5.12 CBI
2894010	2018, Miscibility of Brigade Bird Repellent Granular, DACO: 3.5.13 CBI
2894011	2018, Dielectric Breakdown Voltage of Brigade Bird Repellent Granular, DACO: 3.5.15 CBI
2894012	2018, The Physical State of Brigade Bird Repellent Granular, DACO: 3.5.2 CBI
2894013	2018, Odour Assessment of Brigade Bird Repellent Granular, DACO: 3.5.3 CBI
2894014	2018, Formulation Type for Brigade Bird Repellent Granular, DACO: 3.5.4 CBI
2894016	2018, The Specific Gravity of Brigade Bird Repellent Granular, DACO: 3.5.6 CBI
2894017	2018, The pH of Brigade Bird Repellent Granular, DACO: 3.5.7 CBI
2894018	2018, Brigade Bird Repellent Granular Oxidation/Reduction: Chemical Incompatibility, DACO: 3.5.8 CBI
2894019	2018, The Viscosity of Brigade Bird Repellent Granular, DACO: 3.5.9 CBI
3205798	2021, Brigade Cube and Granular Results, [CBI Removed], DACO: 3.5.10 CBI
3086979	2020, Analysis Report for Methyl Anthranilate Content [CBI Removed] DACO: 3.5.10 CBI
3212693	2021, Storage Studies For Brigade Bird Repellent Granular, DACO: 3.5.14
2894020	2018, Toxicology Summary for Brigade Bird Repellent Granular, DACO: 4.1
2894021	1994, DER, DACO: 4.6.1,4.6.2,4.6.3,4.6.4,4.6.5,4.6.6
2894024	2018, Request for waiver, toxicology data, DACO: 4.6.1, 4.6.2, 4.6.3, 4.6.4, 4.6.5, 4.6.6
2894025	2018, DACO 5.2 Use Description / Exposure Scenarios for Brigade Bird Repellent Cubes , DACO: 5.2
3011150	2016, BD-135 Test Study, DACO: 10.2,10.2.3.3
3011151	2014, Evaluation of BD-135 Block a and Granular Pouches Bird Repellent, DACO: 10.2,10.2.3.3
2894001	2018, Value Summary for Brigade Bird Repellent Granular, DACO: 10.1
2995034	2019, Application Rates, Brigade Cubes, Granular, May, 2019, DACO: 10.1,10.2.3.3
2995033	2019, Value Summaries and Efficacy: Small-scale Trials (Field, Greenhouse), DACO: 10.1,10.2.3.3

B. Additional Information Considered

Published Information

PMRA Document Number	Reference
3192427	Bassioukas, K., D. Orton and R. Cerio, 2004. Occupational airborne allergic contact dermatitis from garlic concurrent with Type I allergy. <i>Contact Dermatitis</i> 50: 39-50.
3192442	Papageorgiou, C. J.P-Corbet, F. Menezes-Bradao, M. Pecegueiro and C. Benezra. 1983. <i>Arch Dermatol Res</i> 1983 275: 229-234
3195485	ChemID Plus Garlic Oil. National Institute of Health, US National Library of Medicine. https://chem.nlm.nih.gov/chemidplus/rn/8000-78-0 (accessed 12/9/2020).
3195486	ChemID Plus Diallyl disulfide. National Institute of Health, US National Library of Medicine. https://chem.nlm.nih.gov/chemidplus/rn/2179-57-9 (accessed 12/9/2020).
3195484	PubChem Allicin. National Institute of Health, US National Library of Medicine. https://pubchem.ncbi.nlm.nih.gov/compound/Allicin (accessed 11/9/2020).

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