

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

**Application Number:** 2017-0402  
**Application:** New EP Product Chemistry–Identity and Proportion of Formulants  
**Product:** Brigand SB  
**Registration Number:** 33117  
**Active ingredient (a.i.):** Bromadiolone  
**PMRA Document Number:** 2843634

### Purpose of Application

The purpose of this application was to register the end-use product Brigand SB based on a precedent product via the PPIP program. Brigand SB is to be applied in structures and outdoors along the fence line of properties to control house mice, roof rats and Norway rats.

### Chemistry Assessment

Brigand SB is formulated as a paste containing bromadiolone at a concentration of 0.005%. This end-use product has a density of 1.25 g/cm<sup>3</sup>. The required chemistry data for Brigand SB have been provided, reviewed and found to be acceptable.

### Health Assessments

With the exception of the allergen wheat, the formulation does not contain any formulants of toxicological concern. The label contains the appropriate warning statement. The formulation is similar enough to that of currently registered rodenticides that toxicology data on the formulation are not required.

Exposures to bromadiolone are adequately addressed through qualitative assessments for applicators and potential postapplication contact with Brigand SB. Considering the product formulation in pre-measured place packs, label precautions, and personal protective equipment, workers are considered to be adequately protected when following label instructions. In addition, the product must be used in bait stations when placed in sites accessible to children, pets, livestock, and non-target animals. Therefore, exposures to the public and homeowners, including children, are not considered to be of concern.

A dietary exposure assessment was not required for this application.

## **Environmental Assessment**

The use pattern for Brigand SB is within the registered use pattern of bromadiolone and the precedent product. Therefore, there are no additional environmental risks associated with the new formulation. The label contains all the applicable and required environmental hazards and precautions statements.

## **Value Assessment**

Bromadiolone, the active ingredient in Brigand SB, is a rodenticide in other registered pest control products used to kill Norway rats, roof rats and house mice. In four laboratory trials, Brigand SB killed 100% of the Norway rats and house mice within 10 days. In four operational trials, the use of Brigand SB resulted in a 92-99% reduction in food consumption and 87-100% reduction in animal tracks for Norway rats and house mice. The data on Norway rats were extrapolated to roof rats because of the similarity in biology. The application rate falls within the registered rate for these pests.

## **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 Brigand SB to control house mice, roof rats and Norway rats.

## References

<b>PMRA Document Number</b>	<b>Reference</b>
2721161	1999, 97061285 Storage Stability and Physical Chemical Characteristics of Rodex Paste Bait - August 1999, DACO: 3.5.10
2721162	2008, 2254-0050 Determination of Relative Density of Rodex Pasta Bait - March 2008, DACO: 3.5.6
2721164	2007, ch-339-2006 Final Report - Rodex Pasta Bait - Determination of the Colour, Odour and Physical State - May 2007, DACO: 3.5, 3.5.1, 3.5.11, 3.5.12, 3.5.13, 3.5.14, 3.5.15, 3.5.16, 3.5.2, 3.5.3, 3.5.4, 3.5.5, 3.5.7, 3.5.8, 3.5.9
2721165	2017, Brigand SB - Product and Applicant Identification, DACO: 3.0,3.1,3.1.1, 3.1.2,3.1.3
2790288	2017, Method of manufacture - bromadiolone paste, DACO: 3.2,3.2.1,3.2.2 CBI
2790289	2007, ch-340-2006 Final Report - Rodex Pasta Bait - Validation of the Analytical Method for the Determination of the Active Ingredient Content , DACO: 3.4.1 CBI
2790290	2017, Chemical-Physical properties differences and justification, DACO: 3.5 CBI
2795148	2017, Method of manufacture - bromadiolone paste, DACO: 3.2 CBI
2795149	2017, Enforcement Analytical Method - bromadiolone pasta 8-21-17, DACO: 3.4 CBI
2721153	2006, pel-011-06 Field Trial Report - House Mice, DACO: 10.2, 10.2.3.1, 10.2.3.3
2721154	2004, pel-011-04 Field Trial Report - Brown Rats, DACO: 10.2, 10.2.3.1, 10.2.3.3
2721155	2005, pel-004-05 Field Trial Report - House Mice, DACO: 10.2, 10.2.3.1, 10.2.3.3
2721156	2005, pel-003-05 Field Trial Report - Brown Rats, DACO: 10.2, 10.2.3.1, 10.2.3.3
2721157	2005, 08-2005 Final Report - Palatability and Efficacy of Aged Rodex Pasta Bait Formulation in Lab Mice - March 2005, DACO: 10.2,10.2.3.1,10.2.3.3
2721158	2005, 07-2005 Final Report - Palatability and Efficacy of Aged Rodex Pasta Bait Formulation in Lab Rats - March 2005, DACO: 10.2,10.2.3.1,10.2.3.3
2721159	2005, 02-2005 Final Report - Palatability and Efficacy Mice, DACO: 10.2.3,10.2.3.1,10.2.3.3
2721160	2005, 01-2005 Final Report - Palatability and Efficacy Rats, DACO: 10.2.3,10.2.3.1,10.2.3.3
2848981	2017, Brigand SB - Use Description-Scenario, DACO: 5.2

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