

## Evaluation Report for Category L, Subcategory 1.1 Application

**Application Number:** 2023-1590  
**Application:** Application Subject to Protection of Proprietary Interests in Pesticide Data (PIIP) Policy – Equivalency/Data Compensation Assessment  
**Applicant:** Intrachem Industries Inc.  
**Product:** INTRA BROME Technical  
**Registration Number:** 35191  
**Active ingredient(s) (a.i.):** Available chlorine and bromine present as 1-bromo-3-chloro-5,5-dimethylhydantoin and related hydantoins  
**PMRA Document Number:** 3560488

### Purpose of Application

The purpose of this application was to register the technical product INTRA BROME Technical, based on a registered precedent product.

### Chemistry Assessment

Common Name: 1-bromo-3-chloro-5,5-dimethylhydantoin and related hydantoins  
 IUPAC\* Chemical Name: 1-bromo-3-chloro-5,5-dimethylimidazolidine-2,4-dione  
 Related hydantoins:  
 3-bromo-1-chloro-5,5-dimethylimidazolidine-2,4-dione  
 1,3-dibromo-5,5-dimethylimidazolidine-2,4-dione  
 1,3-dichloro-5,5-dimethylimidazolidine-2,4-dione  
 CAS† Chemical Name: 1-bromo-3-chloro-5,5-dimethylhydantoin  
 Nonspecific name: bromochloro-5,5-dimethylimidazolidine-2,4-dione

\* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

INTRA BROME Technical has the following properties:

Property	Result
Colour and physical state	White tablet
Nominal concentration	Available chlorine at 27.5% Available bromine at 62.0%
Odour	Faint halogen odour
Specific Gravity	1.8-2.0

<b>Property</b>	<b>Result</b>
Vapour pressure	N/A – product is a solid
pH	3.5 – 4.5
Solubility in water	0.2g / 100g
n-Octanol/water partition coefficient	$\log K_{ow} = -0.9441$

The required chemistry data for INTRA BROME Technical have been provided, reviewed, and found to be acceptable.

### **Health, Environmental and Value Assessments**

Health, environmental and value assessments were not required for this application.

### **Conclusion**

The Pest Management Regulatory Agency has completed an assessment of the information provided and has found the information acceptable to support the registration of INTRA BROME Technical.

## References

<b>PMRA Document Number</b>	<b>Reference</b>
3456126	Richard J. Lewis, Sr., 2007, Hawleys Condensed Chemical Dictionary, DACO: 2.14.2,2.14.3,2.14.4,2.14.8
3456127	Envirotech, 2016, BCDMH Tabs Water Treatment Biocide, DACO: 2.14.13,2.14.14,2.14.6,2.14.7
3456128	2023, INTRA BROME Technical Preliminary Analysis Batch Data, DACO: 2.13.3,2.14.1 CBI
3456130	2023, Part 2 Chem Req Manufacturing Information, DACO: 2.11,2.11.1,2.11.2,2.11.3,2.11.4 CBI
3456132	2023, Part 2 Chemistry - Preliminary Analysis, DACO: 2.13.1,2.13.2,2.13.3,2.13.4
3456133	2023, Octanol/Water Partition Coefficient calculation, DACO: 2.14.11
3456134	2023, Part 2 Chemistry- Chemical and Physical Properties, DACO: 2.14,2.14.1,2.14.10,2.14.11,2.14.12,2.14.13,2.14.14,2.14.15,2.14.2,2.14.3,2.14.4,2.14.5,2.14.6,2.14.7,2.14.8,2.14.9
3552694	2022, Batch Data - COAs from manufacturer, DACO: 2.13.3 CBI

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