



## Evaluation Report for Category B, Subcategory 1.3 Application

**Application Number:** 2010-6298  
**Application:** Changes TGAI Product Chemistry-Specifications  
**Product:** Dantobrom  
**Registration Number:** 20901  
**Active ingredients (a.i.):** Available chlorine present as 1-bromo-3-chloro-5,5-dimethylhydantoin, 1,3-dichloro-5,5-dimethylhydantoin, 1,3-dichloro-5-ethyl-5-methylhydantoin and related hydantoins [DDI] and Available bromine present as 1-bromo-3-chloro-5,5-dimethylhydantoin and related hydantoins [BCH]  
**PMRA Document Number English PDF:** 2060023

### Purpose of Application

The purpose of this application was to update the label guarantee of the registered product, Dantobrom, Registration Number 20901.

### Chemistry Assessment

**Common Name:** Mixture of 1-bromo-3-chloro-5,5-dimethylhydantoin, 1,3-dichloro-5,5-dimethylhydantoin, 1,3-dichloro-5-ethyl-5-methylhydantoin and related hydantoins

**IUPAC Chemical Names:** 1-bromo-3-chloro-5,5-dimethylimidazolidine-2,4-dione  
1,3-dichloro-5,5-dimethylimidazolidine-2,4-dione  
1,3-dichloro-5-ethyl-5-methylimidazolidine-2,4-dione

**CAS Chemical Names:** 1-bromo-3-chloro-5,5-dimethylhydantoin  
1,3-dichloro-5,5-dimethylhydantoin  
1,3-dichloro-5-ethyl-5-methylhydantoin

Dantobrom has the following properties:

<b>Property</b>	<b>Result</b>
Colour and physical state	Off-White solid
Nominal concentration	Available chlorine present as 1-bromo-3-chloro-5,5-dimethylhydantoin, 1,3-dichloro-5,5-dimethylhydantoin, 1,3-dichloro-5-ethyl-5-methylhydantoin and related hydantoin ... 46.6% Available bromine present as 1-bromo-3-chloro-5,5-dimethylhydantoin and related hydantoin ... 36.4%
Odour	Slight chlorine odour
Density	0.85 g/cm <sup>3</sup>
pH	3.6 (1% slurry)
Solubility in water @ 25°C	0.54 g/100 g (or 5.4 mg/mL)

The chemistry requirements for Dantobrom have been completed.

### **Health Assessments**

The toxicity profile of this product is not affected by the amendment of the label guarantee.

### **Environmental Assessment**

An environmental assessment was not required for this application.

### **Value Assessment**

A value assessment is not required for technical grade active ingredient products.

### **Conclusion**

The PMRA has completed an evaluation of the subject application and has determined that it can support the amendments to the label guarantee of Dantobrom, Registration Number 20901.

### **References**

- 1998892 2010, Address, DACO: 2.1,2.2 CBI
- 1998893 2010, Determination of active Ingredient Levels in Dantobrom, EPA Reg. No. 6836-117; Based Upon New Preliminary Analysis Data and Certified Limits for Product Components, DACO: 2.11.1, 2.11.2, 2.11.3, 2.11.4, 2.12.1 CBI
- 1998894 2010, Preliminary Analysis, DACO: 2.13.1, 2.13.3 CBI

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