

## Evaluation Report for Category B, Subcategory 1.1 Application

**Application Number:** 2018-2551  
**Application:** New TGAI Product Chemistry, New Source Same Registrant  
**Product:** Prohexadione Calcium Technical  
**Registration Number:** 32682  
**Active ingredient (a.i.):** Prohexadione Calcium  
**PMRA Document Number:** 3054689

### Purpose of Application

The purpose of this application was to add a new manufacturing site for the technical product, Prohexadione Calcium Technical.

### Chemistry Assessment

Common Name: Prohexadione-calcium  
IUPAC\* Chemical Name: calcium 3-oxido-5-oxo-4-propionylcyclohex-3-enecarboxylate  
CAS† Chemical Name: Cyclohexanecarboxylic acid, 3,5-dioxo-4-(1-oxopropyl)-, ion(1-), calcium, calcium salt (2:1:1)

\* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Prohexadione Calcium Technical has the following properties:

Property	Result
Colour and physical state	Yellow solid
Nominal concentration	96.1%
Odour	Sweet smell odour
Density	1.43 g/mL
Vapour pressure	$1.335 \times 10^{-5}$ Pa at 25°C
pH	6.72
Solubility in water	174 mg/L in distilled water at 20°C
n-Octanol/water partition coefficient	Log $K_{ow}$ = - 2.90

The required chemistry data for Prohexadione Calcium 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 it sufficient to support the addition of the new manufacturing site for Prohexadione Calcium Technical.

## References

<b>PMRA Document Number</b>	<b>Reference</b>
2894345	2018, 2.11 Manufacturing Summary, DACO: 2.11.1,2.11.2,2.11.3,2.11.4 CBI
2894346	2018, 2.12.1 Establishing Certified Limits Prohexadione Calcium, DACO: 2.12.1 CBI
2894347	2018, 2.13 Preliminary Analysis Prohexadione Calcium, DACO: 2.13.1,2.13.2,2.13.3,2.13.4 CBI
2904729	2017, Fine Agrochemicals - GLP Study Report Amendment 1, DACO: 2.13.1,2.13.2,2.13.3 CBI
3009002	2019, Methodology/Validation Response - Prohex Ca, DACO: 2.13.1
3009003	2011, Assay and Validation for Prohexadione-Ca Five Batch Analysis, DACO: 2.13.1
3009004	2011, Analytical Method Validation and Five Batch Characterisation for Prohexadione-Ca, DACO: 2.13.1
3009005	2019, [CBI Removed] Waiver, DACO: 2.13.4
3009006	2010, Handbook of Aqueous Solubility Data 2nd Edition, DACO: 2.13.4
3009007	1973, Mutual Solubilities of Hydrocarbons and Water at 0 and 25 °C, DACO: 2.13.4
3020546	2019, [CBI Removed] Waiver- Deficiency Response, DACO: 2.13.4
3020547	2015, Five Batch Characterisation of Prohexadione -Calcium, DACO: 2.13.4 CBI
3020548	2016, Prohexadione Calcium- Five Batch Characterisation, DACO: 2.13.4 CBI

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