

## Evaluation Report for Category B, Subcategory 1.1, 1.3 Application

**Application Number:** 2020-2701  
**Application:** Changes TGAI- New Source (Site) Same Registrant  
 Changes TGAI - Specifications  
**Product:** Orthene Technical  
**Registration Number:** 22109  
**Active ingredient (a.i.):** Acephate  
**PMRA Document Number:** 3310890

### Purpose of Application

The purpose of this application was to add a new source of technical to the registered technical grade active ingredient, Orthene Technical.

### Chemistry Assessment

Common Name: Acephate  
 IUPAC\* Chemical Name: (RS)-(O,S-dimethyl acetylphosphoramidothioate)  
 CAS† Chemical Name: O,S-dimethyl N-acetylphosphoramidothioate

\* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Orthene Technical has the following properties:

Property	Result
Colour and physical state	Colourless solid
Nominal concentration	99.78%
Odour	objectionable cabbage-like odour
Density	0.32-0.48 g/cm <sup>-3</sup>
Vapour pressure	0.226 mPa (24 °C)
pH	4.67 (1% solution)
Solubility in water	7.9×10 <sup>5</sup> mg/L
n-Octanol/water partition coefficient	log K <sub>ow</sub> = -0.89

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

### **Health Assessments**

The new source of Orthene Technical is considered to be toxicologically equivalent to the currently registered source.

### **Environmental Assessment**

The new source of acephate does not contain any impurities requiring environmental risk management.

### **Conclusion**

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information sufficient to add the new source of technical to the registered Orthene Technical.

## References

<b>PMRA Document No.</b>	<b>Reference</b>
3133584	2020, The Manufacturing Process of Acephate Technical, DACO: 2.11.1, 2.11.2, 2.11.3, 2.11.4, 2.12.1 CBI
3133586	2014, Preliminary Analyses of Five Representative Production Batches of Acephate Technical Grade Active Ingredient (TGAI) To Determine % Acephate and to Quantify its Associated Impurities, DACO: 2.13.2, 2.13.3, 2.13.4, 2.3.1 CBI
3133587	2014, Preliminary Analyses of Five Representative Production Batches of Acephate Technical Grade Active Ingredient (TGAI) and its Associated Impurities, DACO: 2.13.1, 2.13.2, 2.13.3, 2.13.4 CBI
3245620	2021, Response to Query on the level of impurity-4., DACO: 2.13.4 CBI
3245621	2021, Appendix 3 [Privacy removed] Study Number 227-2-12-8136, DACO: 2.13.4 CBI
3306151	2021, Validation of Analytical Method For Determination of [CBI Removed] and Analysis of Five Representative Production Batches of Acephate Technical Grade Active Ingredient (TGAI) to Determine [CBI Removed] Content in Acephate Technical, DACO: 2.13.1, 2.13.2, 2.13.3, 2.13.4 CBI

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