



## Evaluation Report for Category B, Subcategory 1.1 Application

**Application Number:** 2021-0268  
**Application:** Changes TGAI (Product Chemistry) - New Source (site) same registrant  
**Product:** FBN Deltamethrin Technical  
**Registration Number:** 33996  
**Active ingredient (a.i.):** Deltamethrin  
**PMRA Document Number :3380007**

### Purpose of Application

The purpose of this application was to register a new source of FBN Deltamethrin Technical.

### Chemistry Assessment

Common Name: Deltamethrin  
IUPAC\* Chemical Name: (*S*)- $\alpha$ -cyano-3-phenoxybenzyl (1*R*,3*R*)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate  
CAS† Chemical Name: (*S*)-cyano(3-phenoxyphenyl)methyl (1*R*,3*R*)-3-(2,2-dibromoethenyl)-2,2-dimethylcyclopropanecarboxylate

\* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

FBN Deltamethrin Technical has the following properties:

Property	Result
Colour and physical state	White solid powder
Nominal concentration	99.9%
Odour	Odourless
Density	0.51 g/mL at 20°C
Vapour pressure	N/A
pH	6.89, 1% w/v solution
Solubility in water	$< 4 \times 10^{-6}$ g/mL at 20°C
n-Octanol/water partition coefficient	6.10

The required chemistry data for FBN Deltamethrin 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 sufficient to support the new source of FBN Deltamethrin Technical.

### **References**

#### **PMRA**

#### **Document**

<b>Number</b>	<b>Reference</b>
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3193272	2014, Deltamethrin Analytical Profile Study Annex 1 Deltamethrin method validation and quantification, DACO: 2.13,2.13.1,2.13.3 CBI
3193273	2014, Deltamethrin Analytical Profile Study Annex 2 Active Substance [CBI Removed], DACO: 2.13,2.13.1,2.13.2,2.14.12 CBI
3193274	2014, Deltamethrin Analytical Profile Study Annex 3 Active Substance [CBI Removed] Comparison, DACO: 2.13,2.13.1,2.13.2 CBI
3193275	2014, Deltamethrin Analytical Profile Study Annex 4 Active Substance [CBI Removed] Report, DACO: 2.13,2.13.1,2.13.2 CBI
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3193281	2014, Deltamethrin Analytical Profile Study Annex 10 GLP Conformity Certificate, DACO: 2.13 CBI
3193282	2014, Deltamethrin Analytical Profile Study Annex 11 Technical material certificate of analysis, DACO: 2.13,2.13.1,2.13.3 CBI
3193283	2014, Deltamethrin Analytical Profile Study Annex 12 Reference Materials Certificates of Analysis, DACO: 2.13,2.13.1,2.13.2,2.13.3 CBI

3193284 2009, Appearance (Colour, Physical State and Odour) of Deltamethrin Technical, DACO: 2.14,2.14.1,2.14.2,2.14.3 CBI

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3193286 2009, Specific Gravity of Deltamethrin Technical, DACO: 2.14,2.14.6 CBI

3193287 2009, Water Solubility of Deltamethrin Technical, DACO: 2.14,2.14.7 CBI

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3193291 2009, Accelerated Storage Stability of Deltamethrin Technical, DACO: 2.14,2.14.13,2.14.14 CBI

3309937 2021, Determination of [CBI Removed] Content in Five Batches of Deltamethrin Technical, DACO: 2.13.4 CBI

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3309939 2022, Analysis of Five Batches of Deltamethrin TC for Associated Impurities (Amendment to the Final Report), DACO: 2.13.4 CBI

3376347 2022, Manufacturing Process, DACO: 2.11.3 CBI

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