

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

**Application Number:** 2015-2789  
**Application:** Changes to Technical Grade Active Ingredient Product Chemistry – New source (site), for the same registrant, and specifications  
**Product:** Cloquintocet-mexyl Technical  
**Registration Number:** 30527  
**Active ingredients (a.i.):** Cloquintocet-mexyl  
**PMRA Document Number :** 2638989

### Purpose of Application

The purpose of this application was to register a new manufacturing site for the active, Cloquintocet-mexyl Technical, by the same registrant.

### Chemistry Assessment

**Common Name:** Clethodim  
**IUPAC\* Chemical Name:** *rac*-(2*R*)-heptan-2-yl [(5-chloroquinolin-8-yl)oxy]acetate  
**CAS† Chemical Name:** 1-methylhexyl 2-[(5-chloro-8-quinolinyl)oxy]acetate

\* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Cloquintocet-mexyl Technical has the following properties:

Property	Result
Colour and physical state	Light brown powder
Nominal concentration	96.7%
Odour	Odourless
Density	1.05 g/cm <sup>3</sup>
Vapour pressure	5.31 x 10 <sup>-6</sup> Pa (25°C)
pH	5.4
Solubility in water	0.590 mg/L (25°C)
n-Octanol/water partition coefficient	log K <sub>ow</sub> = 5.03 (25°C)

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

### Health Assessments

The new manufacturing site for Cloquintocet-mexyl Technical results in a product that is chemically equivalent to the currently registered source. Subsequently, no toxicological data were reviewed or are required.

### Environmental and Value Assessments

Environmental and value assessments were not required for this application

### Conclusion

The PMRA has completed a review of all available information and found it sufficient to support the registration of the new manufacturing site for the active, Cloquintocet-mexyl Technical.

### References

PMRA Document Number	Reference
1526974	1988, Technical Chemistry File CFP-NVTM-M. Physico-Chemical Properties (safener), DACO: 2.14.1, 2.14.11, 2.14.2, 2.14.6, 2.14.7, 2.14.8, 2.14.9, 2.16 CBI
1993948	2009, Formation of By-Products CGA185072 - Cloquintocet-mexyl, DACO: 2.11.4 CBI
2547232	2014, SA-94/1 - Analytical Method/Validation, DACO: 2.13.1 CBI
2547234	2015, Analytical Method Impurities SB-94/1/Validation, DACO: 2.13.1 CBI
2566512	2015, COAs_Chemical Characterization_[CBI removed]_Ref Stds Sub 2015-2789, DACO: 2.13.2 CBI
2547238	2015, Certificate of Analysis, DACO: 2.13.3 CBI
2557982	2015, Chemical Characterization Ref. Studies, DACO: 2.13.2 CBI
2547237	2015, Cloquintocet-mexyl - Analysis of Five Representative Batches, DACO: 2.13.3 CBI
2547225	2015, Manufacturing Process, DACO: 2.11.1, 2.11.3 CBI
2547226	2015, Starting Materials, DACO: 2.11.2 CBI
2635121	2016, Response to Clarification, DACO: 2.11.1, 2.12, 2.13.3 CBI
2635122	2016, Technical Assessment , DACO: 2.13.3 CBI

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