

## Evaluation Report for Category B, Subcategory 1.1 Application

**Application Number:** 2006-5093  
**Application:** Category B, subcategory 1.1 (new source by same registrant)  
**Product:** Clethodim Technical Herbicide  
**Registration No.:** 28211  
**Active ingredients (a.i.):** Clethodim at 93.3%  
**PMRA Document Number:** 1400635

### Background

The original source of clethodim technical grade active ingredient, "Clethodim Technical Herbicide" (Reg. No. 28211) was first registered in 2006.

### Purpose of Application

The purpose of this Category B.1.1 submission is to register a new manufacturing site by current registrant. This new source of technical grade active ingredient "Clethodim Technical Herbicide" (Reg. No. 28211) is intended for use in the manufacturing, formulating and repacking.

### Chemistry Assessment

**Common Name:** Clethodim  
**IUPAC Chemical Name:** ( $\pm$ )-2-[(*E*)-1-[(*E*)-3-chloroallyloxyimino]propyl]-5-[2-(ethylthio)propyl]-3-hydroxycyclohex-2-enone  
**CAS Chemical Name:** (*E,E*)-( $\pm$ )-2-[1-[[3-chloro-2-propenyl]oxy]imino]propyl]-5-[2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one

Clethodim Technical Herbicide has the following properties:

Property	Result
Colour and physical state	brown liquid
Nominal concentration	93.3% as determined by HPLC
Odour	n/a
Density	1.1585 g/mL at 20°C
Vapour pressure	<0.01 mPa (at 25°C)
pH	n/a
Solubility in water	13.0 mg/mL (20°C, pH 4.2)
n-Octanol/water partition coefficient	Log K <sub>OW</sub> = 4.4 (pH 5.35)

The chemistry requirements for Clethodim Technical Herbicide have been completed.

## Health and Environmental Assessment

Health and environmental assessment is not required.

## Value assessment

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

## Conclusions

The PMRA has completed an evaluation of the subject application and has determined that Clethodim Technical Herbicide is eligible for full registration.

## References

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