



Evaluation Report for Category B, Subcategory 1.1 Application

Application Number: 2014-1012
Application: Changes to technical grade active ingredient product chemistry -
New source same registrant
Product: Kathon 287 Technical Microbicide
Registration Number: 27418
Active ingredients (a.i.): 4,5-Dichloro-2-N-Octyl-3(2H)-Isothiazolone
PMRA Document Number: 2472045

Background

Kathon 287 Technical Microbicide has been registered for use in Canada since 2003.

Purpose of Application

The purpose of this application was to register a new manufacturing site for Kathon 287 Technical Microbicide (Registration Number 27418).

Chemistry Assessment

Common Name: No ISO approved common name. 4,5-dichloro-2-n-octyl 3(2H)-isothiazolone is the PMRA accepted name.
IUPAC Chemical Name: 4,5-dichloro-2-octyl-1,2-thiazol-3(2H)-one
CAS Chemical Name: 3(2H)-Isothiazolone, 4,5-dichloro-2-octyl-

Kathon 287 Technical Microbicide has the following properties:

Property	Result
Colour and physical state	Off white solid
Nominal guarantee	4,5-Dichloro-2-n-octyl-3(2H)-isothiazolone at 98.5 % Available chlorine present as 1-bromo-3-chloro-5,5-dimethylhydantoin and related hydantoins at 28.6% (limits 27.7-29.5%)
Odour	Pungent odour
Specific gravity	1.27 at 25°C
Vapour pressure	0.99 mPa at 25°C
Solubility in water	3.47 mg/L at 20°C
n-Octanol/water partition coefficient	Log K_{ow} = = 2.3-2.84; $0 = 2.8$

The chemistry requirements for Kathon 287 Technical Microbicide have been fulfilled.

Health, Environmental and Value Assessments

Health, environmental and value assessments were not required for this application.

Conclusion

The PMRA has completed a review of available information and has determined that it is sufficient to support the registration of a new manufacturing site for Kathon 287 Technical Microbicide.

References

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