

Evaluation Report for Category B, Subcategory 3.1 Application

Application Number: 2007-1397
Application: Change in Specifications
Product: Chlorpyrifos Technical
Registration Number: 25823
Active ingredients (a.i.): chlorpyrifos
PMRA Document Number: 1584117

Background

Chlorpyrifos is a broad spectrum organophosphate insecticide. Chlorpyrifos Technical that is registered under the Pest Control Products Act registration number 25823 is an insecticide intended for manufacturing use only.

Purpose of Application

The purpose of this application is to update the chemistry specifications, including a change in guarantee from 98 % minimum to 98.5 % nominal and to update the impurity profile.

Chemistry Assessment

Common Name: Chlorpyrifos
Chemical Name: Phosphorothioic acid, O,O-diethyl O-(3,5,6-trichloro-2-pyridinyl) ester

Chlorpyrifos Technical has the following properties:

Property	Result
Colour and physical state	amber to light brown solid
Nominal concentration	98.5% as determined by GC
Odour	Mild mercaptanic odour
Density	1.44 g/cm ³ (at 20°C)
Vapour pressure	2.0 x 10 ⁻⁵ mm Hg (at 25°C)
Solubility in water	1.07 mg/L (25°C, pH 7)
<i>n</i> -Octanol–water partition coefficient	Log K _{ow} = 4.7

The chemistry requirements for Chlorpyrifos Technical have been completed.

Health Assessments

The change in the guarantee, the specifications update, and the impurities profile is not expected to impact the toxicological profile of the product Chlorpyrifos Technical.

Environmental Assessment

N/A

Value Assessment

N/A

Conclusion

The PMRA has concluded an evaluation of the application and has found the information sufficient to support the registration of Chlorpyrifos Technical.

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