

Evaluation Report for Category B, Subcategory 1.2 Application

Application Number: 2011-0573
Application: New Source of Technical Grade Active Ingredient by a New Registrant
Product: Chlormequat Chloride Technical
Registration Number: 31461
Active ingredients (a.i.): chlormequat chloride
PMRA Document Number : 2446464

Background

The source of chlormequat chloride used to determine chemical equivalency was Registration Number 20581.

Purpose of Application

The purpose of this application was to register a new source of the technical grade active ingredient, chlormequat chloride, by a different Registrant.

Chemistry Assessment

Common Name: Chlormequat chloride
 IUPAC Chemical Name: (2-chloroethyl)trimethylammonium chloride
 CAS Chemical Name: 2-chloro-*N,N,N*-trimethylethanaminium chloride

Chlormequat Chloride Technical has the following properties:

Property	Result
Colour and physical state	Light yellow liquid
Nominal concentration	68.2 %
Odour	Moderately sweet
Density @ 20°C	1.14-1.24 g/mL
Vapour pressure @ 20°C	< 10 ⁻⁶ Pa
pH	2.1 (neat); 4.0 (1% solution in pure water); 4.2 (1% solution in CIPAC water D)
Solubility in water	> 886 g/L

Property	Result		
n-Octanol/water partition coefficient (K_{ow})	pH	Log	$\frac{K_{ow}}$
	deionized water		-3.39
	4		-3.08
	7		-3.47
	9		-3.07

The chemistry requirements for Chlormequat Chloride Technical have been completed.

Health and Environmental Assessments

As the new source of chlormequat chloride is chemically equivalent to the registered source, the health and environmental risk profiles are expected to be similar to that of the product used to determine chemical equivalence. No additional assessments were required.

Value Assessment

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

Conclusion

The PMRA has completed an evaluation of the subject application and has determined that it can support the registration of Chlormequat Chloride Technical.

References

PMRA Number	Study Title
2007336	2007, Product Identity and Composition, Description of Beginning Material and Production Process, DACO: 2.11.1, 2.11.2, 2.11.3, 2.11.4, 2.12.1 CBI
2007337	2011, Product Identification, DACO: 2.11.2, 2.14.8 CBI
2007338	1999, Development and Validation of the Analytical Method CF-A 583, DACO: 2.13.1, 2.13.2 CBI
2007340	2003, Characterization of Five Batches of Technical Chlormequat chloride, DACO: 2.13.3 CBI
2007344	2003, Characterization of Five Batches of Technical Chlormequat chloride, DACO: 2.13.3 CBI
2007345	2007, Summary of Physical and Chemical Properties of C-5, DACO: 2.14.1, 2.14.10, 2.14.11, 2.14.12, 2.14.13, 2.14.2, 2.14.3, 2.14.4, 2.14.5, 2.14.6, 2.14.7, 2.14.9
2007346	1999, Physical and Chemical Properties of BAS 062 03 W, DACO: 2.14.1, 2.14.13, 2.14.2, 2.14.3, 2.14.6

2007349	2006, Dissociation Constant of Chlormequat Chloride, DACO: 2.14.10
2007350	2000, Determination of the Partition Coefficient of Chlormequat Chloride BAS 062 W, DACO: 2.14.11
2007357	2000, UV, NMR, IR, MS-Spectra of Chlormequat Chloride BAS 062 W, DACO: 2.14.12 CBI
2007358	2001, Shelf Life in the Original Container of the formulation BAS 062 03 W, DACO: 2.14.14 CBI
2007364	1998, Boiling Point Belcozel Technico (Chlormequat Chloride), DACO: 2.14.5
2007365	2006, Determination of the Water Solubility of Chlormequat Chloride, DACO: 2.14.7
2021870	2011, PART 2 Chemistry DACOs 2.1-9, DACO: 2.1, 2.2, 2.3.1, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9
2066185	2001, Shelf Life in the Original Container of the Formulation BAS 063 03 W 24 Month Storage Analytical Results, DACO: 2.14.14 CBI

ISSN: 1911-8082

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