

Evaluation Report for Category L, Subcategory 1.1 Application

Application Number: 2017-5423
Application: Submissions subject to PPIP policy – no data
Product: WOC Diquat Technical
Registration Number: 33325
Active ingredient (a.i.): Diquat
PMRA Document Number: 2860430

Purpose of Application

The purpose of this application was to register a new source of diquat based on a precedent product.

Chemistry Assessment

Common Name: Diquat
IUPAC* Chemical Name: 6,7-dihydrodipyrido[1,2-a:2',1'-c]pyrazine-5,8-dium
CAS† Chemical Name: 6,7-dihydrodipyrido[1,2-a:2',1'-c]pyrazinedium

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

WOC Diquat Technical has the following properties:

Property	Result
Colour and physical state	Clear burgundy
Nominal concentration	Diquat, present as diquat dibromide ... 21.76%
Odour	odourless
Density	1.21 at 20°C
Vapour pressure	1.01×10^{-2} mPa (at 25°C)
pH	4.0 – 6.0
Solubility in water	300.60 g/L (at 20°C)
n-Octanol/water partition coefficient	$\log K_{ow} \leq -3.28$ at 20.0°C and pH 5.48

The required chemistry data for WOC Diquat Technical have been provided, reviewed, and found to be acceptable.

Health, Environmental and Value Assessments

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

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the available information and is able to support the registration of WOC Diquat Technical, a new source of diquat.

References

PMRA Document Number	References
2804655	2017, Summary of DACO 2 WOC Diquat Tech, DACO: 2.1,2.2,2.3,2.3.1,2.4,2.5,2.6,2.7,2.8,2.9 CBI
2804656	2017, Summary of WOC Diquat Technical Herbicide, DACO: 2.0,2.14,2.14.1,2.14.10,2.14.11,2.14.12,2.14.13,2.14.14,2.14.2,2.14.3,2.14.5,2.14.6,2.14.7,2.14.8,2.14.9 CBI
2804657	2017, Diquat Dibromide 40% TK, DACO: 2.14.1,2.14.14,2.14.2,2.14.3,2.14.6 CBI
2804658	2016, Density Test of Diquat dibromide 40% TK, DACO: 2.14.6 CBI
2804659	2010, Boiling Point of Diquat Tecnico (CDX 356 TP), DACO: 2.14.5 CBI
2804660	2010, Boiling Point of Diquat Tecnico (CDX 356 TP) - Amendment No. 01, DACO: 2.14.5 CBI
2804661	2011, Solubility in water and organic solvents of Diquat Tecnico (CDX 356 TP), DACO: 2.14.7,2.14.8 CBI
2804662	2016, Vapor pressure of Diquat Dibromide 40% TK, DACO: 2.14.9 CBI
2804664	2010, Partition coefficient (N-octanol/water) of Diquat Tecnico (SDX356 TP), DACO: 2.14.11 CBI
2804665	2014, Analysis of Diquat Dibromide Manufacturing CONCENTRATE, DACO: 2.12,2.12.1,2.13,2.13.1,2.13.2,2.13.3,2.13.4,2.14.12 CBI
2804667	2017, Preliminary Analysis Testing of Toluene in 5 Batches of Diquat Dibromide 40% TK, DACO: 2.13,2.13.3,2.13.4 CBI
2804669	2017, The Synthesis and Impurities of Diquat Dibromide Technical Concentrate - Manufacturing Process , DACO: 2.11,2.11.1,2.11.2,2.11.3,2.11.4 CBI

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