



Evaluation Report for Category L, Subcategory 1.1 Application

Application Number: 2023-0576
Application: Application Subject to Protection of Proprietary Interests in Pesticide Data (PIIP) Policy – Equivalency/Data Compensation Assessment
Product: Sinochem Diquat Technical
Registration Number: 35162
Active ingredient (a.i.): Diquat, present as dibromide
PMRA Document Number: 3538395

Purpose of Application

The purpose of this application was to register Sinochem Diquat Technical, a new source of technical diquat, present as dibromide, based on a registered precedent product.

Chemistry Assessment

Common Name: Diquat dibromide
IUPAC* Chemical Name: 1,1'-ethylene-2,2'-bipyridyldiylidium dibromide
CAS† Chemical Name: 6,7-dihydrodipyrido[1,2-*a*:2',1'-*c*]pyrazinediium dibromide

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Sinochem Diquat Technical has the following properties:

Property	Result
Colour and physical state	Maroon liquid
Nominal concentration	21.94%
Odour	Aromatic (pyridine-like)
Density	1232 – 1236 g/L at 20°C
Vapour pressure	103.2 mPa at 20°C
pH	3.94 at 20.8°C
Solubility in water	Completely miscible at 30°C
n-Octanol/water partition coefficient	log K _{ow} < -5.08

The required chemistry data for Sinochem 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 information provided, and has found the information acceptable to support the registration of Sinochem Diquat Technical.

References

PMRA Document Number	Reference
3435736	2022, Manufacturing process, DACO: 2.11.1,2.11.3,2.11.4 CBI
3435739	2019, Determination of Active Content and Impurity Profile of Diquat dibromide 40% TK, DACO: 2.13.1,2.13.2,2.13.3,2.13.4 CBI
3435740	2019, Determination of Physical-chemical properties of Diquat dibromide 40% TK, DACO: 2.14.1, 2.14.10, 2.14.11, 2.14.12, 2.14.13, 2.14.14, 2.14.15, 2.14.2, 2.14.3, 2.14.5, 2.14.6, 2.14.7, 2.14.8, 2.14.9
3529774	2022, Amendment of methodology validation, DACO: 2.13.1
3529775	2022, Storage stability, DACO: 2.14.14

© His Majesty the King in Right of Canada, as represented by the Minister of Health Canada, 2024

All rights reserved. No part of this information (publication or product) may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, or stored in a retrieval system, without prior written permission of Health Canada, Ottawa, Ontario K1A 0K9.