

Evaluation Report for Category B, Subcategory 1.1 Application

Application Number: 2021-2173

Application: Changes TGAI Product Chemistry-New Source (site), same

registrant

Product: Lier Diquat Technical

Registration Number: 33895

Active ingredient (a.i.): diquat, present as dibromide

PMRA Document Number: 3421160

Purpose of Application

The purpose of this application was to add a new manufacturing site for the registered product Lier Diquat Technical.

Chemistry Assessment

Common Name: Diquat dibromide

IUPAC* Chemical Name: 6,7-dihydrodipyrido[1,2-a:2',1'-c]pyrazine-5,8-diium

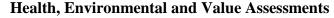
dibromide

CAS† Chemical Name: 6,7-dihydrodipyrido[1,2-a:2',1'-c]pyrazinediium dibromide

Lier Diquat Technical has the following properties:

Property	Result
Colour and physical state	Brown solution
Nominal concentration	Diquat, present as diquat dibromide at 21.73%
Odour	Characteristic
Density	1217.1 g/L
Vapour pressure	9.74 x 10 ⁻³ mPa at 25°C
pН	4.09
Solubility in water	796.08 g/L
n-Octanol/water partition	$\log K_{ow} = -2.612$
coefficient	

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





^{*} International Union of Pure and Applied Chemistry

[†] Chemical Abstracts Service

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 it sufficient to support the new manufacturing site of Lier Diquat Technical.

References

PMRA Document Number Reference 2019, Determination of active content and impurities of Lier Diquat Technical, 3233970 DACO: 2.13,2.2 CBI 3233971 2019, Chemical and physical reports of Lier Diquat Technical, DACO: 2.14 2020, manufacturing methods for Lier Diquat Technical, DACO: 3267742 2.11.1,2.11.3,2.11.4 CBI 3418732 2022, Clarification of method for Lier Diquat technical, DACO: 2.13.1 2022, Storage stability data of Lier Diquat technical, DACO: 2.14.14 3418733

© His Majesty the King in Right of Canada, as represented by the Minister of Health Canada, 2023

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.