

## 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-dium dibromide  
 CAS† Chemical Name: 6,7-dihydrodipyrido[1,2-*a*:2',1'-*c*]pyrazinedium dibromide

\* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

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	$9.74 \times 10^{-3}$ mPa at 25°C
pH	4.09
Solubility in water	796.08 g/L
n-Octanol/water partition coefficient	$\log K_{ow} = -2.612$

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

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

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