

## Evaluation Report for Category B, Subcategory 1.1 Application

**Application Number:** 2021-1844  
**Application:** Changes TGAI Product Chemistry- New Source (site) same registrant  
**Product:** FBN Diquat Technical  
**Registration Number:** 33325  
**Active ingredient (a.i.):** Diquat, present as dibromide  
**PMRA Document Number:** 3382491

### Purpose of Application

The purpose of this application was to register a new source of FBN Diquat Technical by the same registrant.

### Chemistry Assessment

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

\* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

FBN 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	1.22-1.27 g/mL at 20°C
Vapour pressure	$1.01 \times 10^{-2}$ 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 FBN 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 a review of the information submitted and has found it sufficient to support the registration of a new source of FBN Diquat Technical.

## References

PMRA Document Number	References
3225575	2019, Qualitative and Quantitative Profile of Diquat Technical (Five Batch Analysis), DACO: 2.13,2.13.1,2.13.2,2.13.3,2.13.4 CBI
3225576	2020, Synthesis and Impurities of Diquat Dibromide Technical Concentrate, DACO: 2.11,2.11.1,2.11.2,2.11.3 CBI
3274755	2021, DACO 2.13.4 Waiver Rationale, DACO: 2.13.4 CBI
3371800	2022, Declaration of Confirmation of [CBI Removed] DACO: 2.13.3 CBI

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