

## Evaluation Report for Category B, Subcategory 1.1 Application

**Application Number:** 2020-4337  
**Application:** Changes Technical Grade Active Ingredient (TGAI) Chemistry-  
 New Source (site)  
**Product:** Bromotril Technical  
**Registration Number:** 27675  
**Active ingredients (a.i.):** Bromoxynil  
**PMRA Document Number :** 3281238

### Purpose of Application

The purpose of this application was to add a new source of bromoxynil to Bromotril Technical.

### Chemistry Assessment

**Common Name:** Bromoxynil octanoate  
**IUPAC\* Chemical Name:** 2,6-dibromo-4-cyanophenyl octanoate  
**CAS† Chemical Name:** 2,6-dibromo-4-cyanophenyl octanoate

\* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Bromotril Technical has the following properties:

Property	Result
Colour and physical state	slightly yellow solid
Nominal concentration	66.1 % bromoxynil (present as the octanoate ester)
Odour	faint odour
Density	1.4823 g/mL
Vapour pressure	$8.6 \times 10^{-4}$ Pa at 25 °C
pH	2.5 - 3
Solubility in water	0.003 g/L
n-Octanol/water partition coefficient	$5.43 \pm 0.07$ (at pH 6.1)

The required chemistry data for Bromotril 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 sufficient to add a new source of bromoxynil to Bromotrifluralin Technical

## References

### PMRA

#### Document

Number	Reference
1326098	2006, Bromoxynil Octanoate Physical and Chemical Characteristics, DACO: 2.14.1, 2.14.11,2.14.12,2.14.13,2.14.2,2.14.3,2.14.4,2.14.6,2.14.7,2.14.8
788396	2002, Accelerated Storage Stability Study, DACO: 2.14.14 CBI
1326097	2006, Bromoxynil Octanoate Vapour Pressure, DACO: 2.14.9
3154954	2019, Manufacturing Process of Bromoxynil octanoate, DACO: 2.11.1,2.11.2,2.11.3 CBI
3154955	2019, Discussion of impurities of Bromoxynil octanoate technical, DACO: 2.11.4 CBI
3154957	2019, Analysis of 5 Batches of Bromoxynil Octanoate Technical Material to Include the Determination of the relevant Manufacturing Process Impurities and Validation, DACO: 2.13.1,2.13.2,2.13.3 CBI
3278767	27675-Bromotrifluralin Technical-letter of intent-13oct2021

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