

## Evaluation Report for Category B, Subcategory 1.2 Application

**Application Number:** 2017-0324  
**Application:** New TGAI Product Chemistry – New Source (site) New Registrant  
**Product:** NewAgco Metribuzin Technical  
**Registration Number:** 33853  
**Active ingredient (a.i.):** Metribuzin  
**PMRA Document Number :** 2859090

### Purpose of Application

The purpose of this application was to register NewAgco Metribuzin Technical, a new source of the active ingredient metribuzin, by a new registrant.

### Chemistry Assessment

**Common Name:** Metribuzin  
**IUPAC\* Chemical Name:** 4-amino-6-*tert*-butyl-4,5-dihydro-3-methylthio-1,2,4-triazin-5-one  
*or*  
 4-amino-6-*tert*-butyl-3-methylthio-1,2,4-triazin-5(4*H*)-one  
**CAS† Chemical Name:** 4-amino-6-(1,1-dimethylethyl)-3-(methylthio)-1,2,4-triazin-5(4*H*)-one

\* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

NewAgco Metribuzin Technical has the following properties:

Property	Result
Colour and physical state	White powder
Nominal concentration	98.9%
Odour	Characteristic odour
Density	1.2692 g/mL (at 20°C)
Vapour pressure	0.0436 mPa at 20°C 0.103 mPa at 32°C 0.177 mPa at 40°C
pH	6.00
Solubility in water	1.20 g/L (20°C)

Property	Result
n-Octanol/water partition coefficient	Log K <sub>ow</sub> = 1.67

The required chemistry data for NewAgco Metribuzin 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 support the registration of NewAgco Metribuzin Technical.

### References

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2718759	2017, Production of Metribuzin, DACO: 2.11.1, 2.11.3 CBI
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2718764	2017, Discussion of Formation of Impurities, DACO: 2.11.4 CBI
2718765	2017, Analytical Validation, DACO: 2.13.1 CBI
2718766	2016, Determination of Active Content and Impurity Profile of Metribuzin, DACO: 2.12.1, 2.13.2, 2.13.3 CBI
2718767	2015, Metribuzin Technical: Determination of the Colour, Odour and physical State, DACO: 2.14.1, 2.14.2, 2.14.3 CBI
2718768	2015, Metribuzin Technical: Determination of the pH value and Acidity or Alkalinity, DACO: 2.14.15 CBI
2718769	2015, Metribuzin Technical: Determination of the relative Density, DACO: 2.14.6 CBI
2718770	2015, Metribuzin Technical: Determination of the Boiling Point, DACO: 2.14.5 CBI
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2718773	2015, Metribuzin Technical: Determination of the Vapour Pressure, DACO:

	2.14.9 CBI
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2718776	2015, Metribuzin Technical: Determination of the Solubility in Organic Solvents, DACO: 2.14.8 CBI
2718777	2015, Metribuzin Technical: Determination of the Dissociation Constant in Water, DACO: 2.14.10 CBI
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2718779	2015, Metribuzin Technical: Validation of the Analytical Method for the Determination of the Active Ingredient Content, DACO: 2.13.1 CBI
2718780	2015, Metribuzin Technical: Validation of the Analytical Method for the Determination of the Significant Impurities Content, DACO: 2.13.1 CBI
2718781	2015, Metribuzin Technical: HPLC/MS/DAD Screening for Impurities Content in Five Batch Samples, DACO: 2.12.1, 2.13.2, 2.13.3 CBI
2718782	2015, Metribuzin Technical: Complete Analysis of Five Batch Samples, DACO: 2.12.1, 2.13.2, 2.13.3 CBI
2718783	2015, Metribuzin Technical: Spectroscopic Characterization of Five Batch Samples, DACO: 2.12.1, 2.13.2, 2.13.3 CBI
2718784	2016, Physical Chemical Properties Test of Metribuzin TC, DACO: 2.14.1, 2.14.12, 2.14.13, 2.14.14, 2.14.15, 2.14.2, 2.14.3, 2.14.4, 2.14.6, 2.14.8 CBI
2797149	2017, Revised Method of Manufacture of the Active Constituent, DACO: 2.11.3 CBI
2797151	2016, Determination of Active Content and Impurity Profile of Metribuzin, DACO: 2.13.4 CBI
2841772	2017, Manufacturing Process and Formation of Impurities of Metribuzin Technical, DACO: 2.11.3 CBI

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