

## **Evaluation Report for Category B Subcategory 1.1, 1.3 Application**

**Application Number:** 2008-0762

**Application:** B.1.1 (changes to product chemistry-new source same registrant),

B.1.3 (changes to product chemistry specifications)

**Product:** Sencor Technical

**Registration Number:** 20537

**Active ingredients (a.i.):** metribuzin (BAX)

PMRA Document Number: 1754841

## **Purpose of Application**

Bayer CropScience has submitted an application to register a new source of metribuzin and to change the product chemistry specifications of Sencor Technical.

### **Chemistry Assessment**

Common Name: Metribuzin

Chemical Name: 4-amino-6-*tert*-butyl-4,5-dihydro-3-methylthio-1,2,4-triazin-5-one

Sencor Technical has the following properties:

Property	Result
Colour and physical state	white to light grey with a bluish cast
Nominal concentration	guaranteed at 94.5%
Odour	characteristic, slight musty
Density	1.27 g/mL (at 20°C)
Vapour pressure	$5.8 \times 10^{-7} \text{ mbar at } 20^{\circ}\text{C} \ (= 0.058 \text{ mPa})$
pН	5.5 for 1% solution
Solubility in water	0.101% (20°C)
n-Octanol/water partition coefficient	$\log K_{ow} = 1.76$

The chemistry requirements for Sencor Technical have been completed.



#### **Health Assessments**

The acute toxicity of Sencor Technical in rats is high by the oral route ( $LD_{50} = 510/322$  mg/kg bw), low by the dermal route ( $LD_{50} > 5000$  mg/kg bw) and low by the inhalation route ( $LC_{50} > 2.045$  mg/L). It is minimally irritating to the eye and the skin of rabbits and is not a skin sensitizer in guinea pigs.

No new residue data were submitted for the present submission. The food residue profile of the proposed Sencor Metribuzin Technical is expected to be similar to that of the original registered Sencor Metribuzin Technical (PCP # 20537) as chemistry concluded that both technical grade active ingredients were chemically equivalent. No impact on the magnitude of residues is expected. Consequently, no increase in dietary exposure is anticipated.

#### **Environmental and Value Assessment**

Environmental and Value assessments were not required for this application.

#### Conclusion

The PMRA has completed an assessment of available information and has found the information sufficient to support the registration of the new source of metribuzin and the changes to the product chemistry specifications of Sencor Technical.

#### References

PMRA Document Number	Reference
Chemistry:	
1557108	2008, Sencor Technical Herbicide-PART 2 Chemistry requirements for the registration of a technical grade of active ingredient (TGAI) or an integrated system product (ISP)., [CBI REMOVED], DACO: 2.0,2.1,2.2,2.3,2.3.1,2.4,2.5,2.6,2.7,2.8,2.9 CBI
1557109	2007, Product Chemistry of Sencor Technical, [CBI REMOVED], DACO: 2.0,2.11,2.11.1,2.11.2,2.11.3,2.11.4,2.12,2.12.1,2.13,2.13.1,2.13.2,2.13.3,2.13. 4,2.2,2.3,2.3.1,2.4,2.5,2.6,2.7,2.8,2.9 CBI
1711020	2009, DACO2.11.2+2.11.3-[CBI REMOVED]-Manuf-Process, N, DACO: 2.11.2,2.11.3 CBI
1711021 1726036	2007, Material Accountability of AE F055208 (Metribuzin) Manufactured at [CBI REMOVED], DACO: 2.11.2,2.11.3 CBI 2007, Material Accountability of AE F055208 (Metribuzin) Manufactured at [CBI REMOVED], DACO: 2.11.2,2.11.3 CBI

- 1726037 2007, Material Accountability of AE F055208 (Metribuzin) Manufactured at [CBI REMOVED], DACO: 2.11.2,2.11.3 CBI
- 1726038 2007, Material Accountability of AE F055208 (Metribuzin) Manufactured at [CBI REMOVED], DACO: 2.11.2,2.11.3 CBI

## Toxicology:

- 1013296. (1998). Acute Oral Toxicity Study with Metribuzin (Sencor<sup>®</sup>) Technical in Rats. Bayer Corporation, Agriculture Division, Toxicology, Laboratory report number 108353. Study report date: 04-August-1998. Sponsor report number 98-012-QJ. Unpublished. DACO 4.2.1.
- 1013297. (1998). Acute Dermal Toxicity Study with Metribuzin (Sencor<sup>®</sup>) Technical in Rats. Bayer Corporation, Agriculture Division, Toxicology, Laboratory report number 108364. Study report date: 11-August-1998. Sponsor report number 98-022-QK. Unpublished. DACO 4.2.2.
- 1013299. (2001). Study on Acute Inhalation Toxicity in Rats according to OECD No. 403. Institute of Toxicology/Laboratory Inhalation, Bayer AG, Laboratory report number T5070413. Study report date: 29-May-2001. Sponsor report number PH 31057. Unpublished. DACO 4.2.3.
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- 1013316. (1998). Primary Dermal Irritation Study in Rabbits with Sencor Technical. Covance Laboratories Inc., Laboratory report number 19257-0-830. Study report date: 13-July-1998. Sponsor report numbers 98-C325-QB and 108387. Unpublished. DACO 4.2.5.
- 1013317. (1989). Study of Skin Sensitization Effect on Guinea Pigs (Buehler Test). Bayer AG, Fachbereich Toxikologie, Laboratory report number T0030584. Study report date: 18-September-1989. Sponsor report number 18350. Unpublished. DACO 4.2.6.
- 013318. (2002). Study for the Skin Sensitization Effect in Guinea Pigs (Guinea Pig Maximization Test According to Magnusson and Kligman). Bayer AG, Institute of Toxicology, Department of Research Toxicology, Laboratory report number T7071441. Study report date: 04-June-2002. Sponsor Report Number PH 32081. Unpublished. DACO 4.2.6.

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