

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

**Application Number:** 2015-7178

Application: New TGAI Product Chemistry – New Source (site) Same

Registrant and Specifications

**Product:** Syngenta Dicamba Technical 2 Herbicide

**Registration Number:** 32672 **Active ingredients (a.i.):** Dicamba **PMRA Document Number:** 2738664

### **Purpose of Application**

The purpose of this application was to add an alternate manufacturing source to the new source of the active ingredient dicamba registered under 2015-7177.

#### **Chemistry Assessment**

Common Name: Dicamba

IUPAC\* Chemical Name: 3.6-dichloro-o-anisic acid

or

3,6-dichloro-2-methoxybenzoic acid

CAS† Chemical Name: 3,6-dichloro-2-methoxybenzoic acid

Syngenta Dicamba Technical 2 Herbicide has the following properties:

| Property                  | Result                                      |
|---------------------------|---|
| Colour and physical state | Light cream to tan solid                    |
| Nominal concentration     | 98%   |
| Odour                     | Weak to slightly aromatic and pungent odour |
| Density                   | 1.5 g/mL                                    |
| Vapour pressure           | 1.67 mPa (at 25°C)                          |
| pH                        | 2 - 5                                       |
| Solubility in water       | 6.6 g/L (pH 1.8)                            |
|                           | >250 g/L (pH 4.1, pH 6.8, pH 8.2)           |



<sup>\*</sup> International Union of Pure and Applied Chemistry

<sup>†</sup> Chemical Abstracts Service

| Property                              | Result                        |
|---------------------------------------|-------------------------------|
| n-Octanol/water partition coefficient | $Log K_{ow} = -1.9 (pH 8.9)$  |
|                                       | $Log K_{ow} = -1.88 (pH 6.8)$ |
|                                       | $Log K_{ow} = -0.55 (pH 5.0)$ |

The required chemistry data for Syngenta Dicamba Technical 2 Herbicide have been provided, reviewed, and found to be acceptable.

#### **Health Assessments**

Exposure assessments were not required for this application.

Syngenta Dicamba Technical 2 Herbicide was of low toxicity to rats via the oral, dermal, and inhalation routes. It was severely irritating to the isolated chicken eye. It was non-irritating to the skin of rabbits and it was not a dermal sensitizer in mice.

#### **Environmental Assessment**

The Dicamba technical from the new source contains contaminants which have been identified in the federal government's Toxic Substances Management Policy (TSMP, 1995) as Track 1 substances. When compared to other registered sources; the use of the new source is not expected to result in an increase in the release of Track-1 contaminants. PMRA's strategy to manage Track 1 contaminants in pest control products is presented in DIR99-03.

#### **Value Assessment**

A value assessment was not required for this application.

#### Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided and is able to support the alternate manufacturing site for Syngenta Dicamba Technical 2 Herbicide.

## References

| PMRA<br>Document<br>Number | References  |
|----------------------------|---|
| 2597137                    | 2003, Dicamba SAN837 - Confirmation of structures of by-products, DACO: 2.12.2, 2.13.4 CBI                          |
| 2597139                    | 2014, Dicamba Technical SAN837 - Analytical Method and Validation SA-86/1, DACO: 2.13.1 CBI Y                       |
| 2597138                    | 2015, Dicamba SAN837 - Standards/Certficate of Analysis, DACO: 2.13.3 CBI   |
| 2678477                    | 2016, Confidential Business Information - Dicamba Technical 2 Herbicide - Response to deficiency , DACO: 2.12.1 CBI |
| 2656170                    | 2016, Confidential Business Information - Dicamba Technical 2 Herbicide - Clarification Note, DACO: 2.12.1 CBI      |
| 2678478                    | 2016, Dicamba - Analysis of Five Representative Batches Produced at [CBI removed] - Final Report, DACO: 2.13.4 CBI  |
| 2678479                    | 2016, Dicamba Validation of Analytical Method SBA-86/1 - Final Report, DACO: 2.13.4 CBI                             |
| 2597325                    | 2015, Dicamba - Acute Oral Toxicity - Up-And-Down Procedure in Rats - Final Report, DACO: 4.2.1                     |
| 2597326                    | 2015, Dicamba Acute Dermal Toxicity in Rats - Final Report, DACO: 4.2.2   |
| 2597327                    | 2015, Dicamba - Acute Inhalation Toxicity in Rats - Final Report, DACO: 4.2.3                                       |
| 2597328                    | 2015, Dicamba - Primary Skin Irritation in Rabbits - Final Report, DACO: 4.2.5                                      |
| 2597329                    | 2015, Dicamba In Vitro Eye Irritation Test in Isolated Chicken Eyes - Final Report, DACO: 4.2.4                     |
| 2597330                    | 2015, Dicamba - Local Lymph Node Assay (LLNA) in Mice - Final Report, DACO: 4.2.6                                   |
| 2597331                    | 2015, Syngenta Dicamba Technical 2 Herbicide - Summary Toxicology Profile, DACO: 12.7, 4.1, Document M              |

ISSN: 1911-8082

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