

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

| <b>Application Number:</b>  | 2015-7177   |
|-----------------------------|---|
| Application:                | New TGAI Product Chemistry – New Source (site) Same |
|                             | Registrant and Specifications                       |
| Product:                    | Syngenta Dicamba Technical 2 Herbicide              |
| <b>Registration Number:</b> | 32672   |
| Active ingredients (a.i.):  | Dicamba   |
| PMRA Document Number        | : 2738141   |

## **Purpose of Application**

The purpose of this application was to register a new source of manufacture of the active ingredient dicamba, by the same registrant.

### **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 |

\* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

| 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)                          |
| рН                        | 2 - 5                                       |
| Solubility in water       | 6.6 g/L (pH 1.8)                            |
|                           | >250 g/L (pH 4.1, pH 6.8, pH 8.2)           |



| Property | Result                              |
|----------|-------------------------------------|
|          | Log K <sub>ow</sub> = -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 registration of Syngenta Dicamba Technical 2 Herbicide.

#### References

| PMRA<br>Document<br>Number | References   |
|----------------------------|--|
| 2597322                    | 2003, Dicamba SAN837 - Confirmation of structures of by-products, DACO: 2.12.2,2.13.4 CBI                |
| 2597324                    | 2014, Dicamba Technical SAN837 - Analytical Method and Validation SA-86/1, DACO: 2.13.1 CBI              |
| 2597323                    | 2015, Dicamba SAN837 - Standards/Certficate of Analysis, DACO: 2.13.3 CBI                                |
| 2678131                    | 2016, Confidential Business Information - Dicamba Technical 2 - Response to deficiency, DACO: 2.12.1 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   |

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