

Evaluation Report for Category L, Subcategory 1.1 Application

Application Number: 2021-5099
Application: Submissions Subject to Protection of Proprietary Interests in Pesticide Data Policy/ Data Compensation Assessment
Product: CAC 2,4-D 2-EHE Technical
Registration Number: 34649
Active ingredient (a.i.): 2,4-D (present as ethylhexyl ester)
PMRA Document Number: 3388706

Purpose of Application

The purpose of this application was to register a new source of 2,4-D (present as ethylhexyl ester), CAC 2,4-D 2-EHE Technical, based on a precedent.

Chemistry Assessment

Common Name: 2,4-D, present as 2-ethylhexyl ester; 2,4-D-ethyl
 IUPAC* Chemical Name: (RS)-2-ethylhexyl (2,4-dichlorophenoxy)acetate
 CAS† Chemical Name: 2-ethylhexyl 2-(2,4-dichlorophenoxy)acetate

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

CAC 2,4-D 2-EHE Technical has the following properties:

| Property | Result |
|---------------------------------------|--------------------------------------|
| Colour and physical state | Pale yellow liquid |
| Nominal concentration | 64.7% |
| Odour | Mild ester |
| Density | 1.1447 – 1.1455 g/mL at 20°C |
| Vapour pressure | 4.80×10^{-4} Pa at 25°C |
| pH | 6 (1% w/v solution) |
| Solubility in water | 0.0553 ± 0.003 mg/L (pH 7, 20°C) |
| n-Octanol/water partition coefficient | $\log K_{ow} = 5.78$ |

The required chemistry data for CAC 2,4-D 2-EHE 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 provide and has found it sufficient to support the registration of CAC 2,4-D 2-EHE Technical.

References

| PMRA Document Number | References |
|-----------------------------|--|
| 3050039 | 2016, Preliminary Analysis, Enforcement Analytical Method & Qualitative and Quantitative Profile of the test substance 2,4-D Technical (Five Batch Analysis), DACO: 2.13.4 CBI |
| 3270683 | 2021, Purity Profile of Five Batches of 2,4-D EHE Technical, DACO: 2.13.1,2.13.2,2.13.3,2.13.4 CBI |
| 3270684 | 2021, Chemistry Information and Manufacturing Method for CAC 2,4-D 2-EHE Technical, DACO: 2.1,2.11.1,2.11.2,2.11.3,2.11.4,2.12.1,2.2,2.3,2.3.1,2.4,2.5,2.6,2.7,2.8,2.9 CBI |
| 3270685 | 2020, Determination of Appearance (Color, Odor and Physical state) of 2,4-D EHE TC, DACO: 2.14.1,2.14.2,2.14.3 CBI |
| 3270686 | 2020, Determination of Boiling Point of 2,4-D EHE TC, DACO: 2.14.5 CBI |
| 3270687 | 2020, Determination of Density of 2,4-D EHE TC, DACO: 2.14.6 CBI |
| 3270688 | 2021, Determination of Water Solubility of 2,4-D EHE TC, DACO: 2.14.7 CBI |
| 3270689 | 2020, Determination of Solubility of 2,4-D EHE TC, DACO: 2.14.8 CBI |
| 3270690 | 2021, Accelerated Storage Stability Test and Corrosion Characteristics of 2,4-D EHE TC, DACO: 2.14.14 CBI |
| 3270691 | 2020, Determination of the pH of 1% (w/v) Aqueous Suspension of 2,4-D EHE TC, DACO: 2.14.15,830.7000 CBI |
| 3270692 | 2020, Corrosive Properties of 2,4-D EHE TC, DACO: 2.14.13 CBI |
| 3270693 | Anon, 2021, Physical and Chemical Properties of 2,4-D 2-EHE Technical, DACO: 2.16 |
| 3270694 | 2021, [CBI REMOVED] in 2,4-D 2-EHE Technical, DACO: 2.11.4 CBI |

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