

Evaluation Report for Category B, Subcategory 1.1 Application

Application Number: 2012-3496
Application: Changes to the Technical Grade Active Ingredient Product
 Chemistry - New Source (site) same registrant
Product: Oxadiazon Technical
Registration Number: 23590
Active ingredients (a.i.): Oxadiazon (OXA)
PMRA Document Number : 2294624

Purpose of Application

The purpose of this application was to register a new manufacturing site for Oxadiazon Technical (Registration number 23590).

Chemistry Assessment

Common Name: Oxadiazon
IUPAC Chemical Name: 5-*tert*-butyl-3-(2,4-dichloro-5-isopropoxyphenyl)-1,3,4-oxadiazol-2(3*H*)-one
CAS Chemical Name: 3-[2,4-dichloro-5-(1-methylethoxy)phenyl]-5-(1,1-dimethylethyl)-1,3,4-oxadiazol-2(3*H*)-one

Oxadiazon Technical has the following properties:

Property	Result								
Colour and physical state	Beige solid								
Nominal concentration	99%								
Odour	Weak odour, not characteristic								
Density at 20°C	1.30 g/cm ³								
Vapour pressure at 25°C	0.1 mPa								
pH	6.1 (1% aqueous suspension)								
Solubility in water	<table border="0"> <tr> <td><u>pH</u></td> <td><u>Solubility (mg/L)</u></td> </tr> <tr> <td>buffer, pH 5</td> <td>0.79</td> </tr> <tr> <td>distilled water, pH 6.20.92</td> <td></td> </tr> <tr> <td>buffer, pH 9</td> <td>0.76</td> </tr> </table>	<u>pH</u>	<u>Solubility (mg/L)</u>	buffer, pH 5	0.79	distilled water, pH 6.20.92		buffer, pH 9	0.76
<u>pH</u>	<u>Solubility (mg/L)</u>								
buffer, pH 5	0.79								
distilled water, pH 6.20.92									
buffer, pH 9	0.76								
n-Octanol/water partition coefficient	Log K _{ow} = 4.9; K _{ow} = 7.9 × 10 ⁴ (pH 5.7, 25°C)								

The chemistry requirements for Oxadiazon Technical have been completed.

Health, Environmental and Value Assessments

Health, environmental and value assessments were not required for this application.

Conclusion

The PMRA has completed an assessment of available information for Oxadiazon Technical and has found the information sufficient to support the addition of a new manufacturing site for Oxadiazon Technical.

References

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- 2221059 2012, Oxadiazon (AE F082671; RP 17623) Description of the Manufacturing Process of the Technical Grade Active Substance (Specification No. 102000026621) For Canada, DACO: 2.11,2.11.1,2.11.2,2.11.3 CBI
- 2221063 2012, Oxadiazon Technical Material - Discussion of the Formation of Impurities in Oxadiazon, DACO: 2.11.4 CBI
- 2221066 2012, Material Accountability of Technical Oxadiazon (AE F082671), DACO: 2.12, 2.12.1, 2.12.2, 2.13, 2.13.1, 2.13.2, 2.13.3 CBI
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- 2221078 2011, Oxadiazon (AE F082671), technical substance: Relative density, DACO: 2.14.6 CBI
- 2221081 2011, Oxadiazon (AE F082671), technical substance: Partition coefficient 1-octanol / water (HPLC method), DACO: 2.14.11 CBI
- 2221083 2011, Oxadiazon (AE F082671), technical substance: Solubility in distilled water and at pH 5 and pH 9 (column elution method), DACO: 2.14.8 CBI

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