

Evaluation Report for Category B, Subcategory 1.1 Application

Application Number: 2020-1946
Application: Changes to ISP Product Chemistry-New Source (site) same registrant
Product: OxiDate 2.0 Technical
Registration Number: 32906
Active ingredients (a.i.): hydrogen peroxide, peroxyacetic acid
PMRA Document Number: 3228999

Purpose of Application

The purpose of this application is to register two new manufacturing plants for the integrated system product, OxiDate 2.0 Technical.

Chemistry Assessment

Common Name: Hydrogen peroxide
 Peroxyacetic acid

IUPAC* Chemical Name: Hydrogen peroxide
 Ethaneperoxoic acid

CAS† Chemical Name: Hydrogen peroxide (H₂O₂)
 Ethaneperoxoic acid

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

OxiDate 2.0 Technical has the following properties:

Property	Result
Colour and physical state	Colourless liquid
Nominal concentration	27.0% hydrogen peroxide 2.5% peroxyacetic acid
Odour	Pungent
Density	1.08 – 1.11 g/mL
Vapour pressure	0.14-0.15 kPa for 20-35% hydrogen peroxide 1.9 kPa for peroxyacetic acid
pH	1 – 3.5
Solubility in water	Completely soluble

Property	Result
n-Octanol/water partition coefficient	Log K _{ow} = -1.57 for hydrogen peroxide Log K _{ow} = -1.09 for peroxyacetic acid

The required chemistry data for OxiDate 2.0 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 provided, and has found it sufficient to register the new manufacturing plants for OxiDate 2.0 Technical.

References

PMRA

Document

Number	Reference
1384167	2000, Manufacturing Methods, DACO: 2.11.1,2.11.2,2.11.3,2.11.4 CBI
1384171	2000, Waiver for Not Submitting Chemical and Physical Property Protocols and Certain Studies, DACO: 2.14.1, 2.14.10, 2.14.11, 2.14.12, 2.14.13, 2.14.2, 2.14.3, 2.14.4, 2.14.5, 2.14.6, 2.14.7, 2.14.8, 2.14.9 CBI
1384175	Manufacturing Methods for the TGAI, Kirk-Othmer Encyclopedia of Chemical Technology (3rd Ed.). John Wiley and Sons, Inc., New York, NY, pp. 12-38, DACO: 2.11.1 CBI
1384176	Description of Starting Materials, DACO: 2.11.2 CBI
1384177	Detailed Production Process Description, DACO: 2.11.3 CBI
1384178	Discussion of Formation of Impurities, DACO: 2.11.4 CBI
3122091	2016, Analytical Issues with Determination of Acetic Acid in Oxidate 2.0, DACO: 2.13.1,2.13.2,2.13.3 CBI
3122092	2020, Preliminary Analysis of OxiDate 2.0 Technical-[CBI-removed], DACO: 2.13.1,2.13.2,2.13.3,2.13.4 CBI
3122093	2020, Preliminary Analysis of OxiDate 2.0 Technical-[CBI-removed], DACO: 2.13.1,2.13.2,2.13.3,2.13.4 CBI
3127651	2020, 32906-Oxidate 2.0 TGAI-15june2020-letter of intent-2 sources, DACO: 2.1,2.2,2.3,2.3.1
3217797	2021, Chemistry Clarification Request -[CBI-removed] -05april2021, DACO: 2.13.3 CBI
3217798	2021, Chemistry Clarification Request -[CBI-removed] -05april2021, DACO: 2.13.3 CBI

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