

Evaluation Report for Category L, Subcategory 1.1 Application

Application Number: 2018-4016
Application: Application subject to the Protection of Proprietary Interests in Pesticide Data Policy
Product: Pinoxaden Agrogill Technical Grade Active Ingredient
Registration Number: 33733
Active ingredients (a.i.): Pinoxaden
PMRA Document Number: 3010407

Purpose of Application

The purpose of this application was to register a new source of pinoxaden, based on a precedent.

Chemistry Assessment

Common Name: Pinoxaden
 IUPAC* Chemical Name: 8-(2,6-diethyl-p-tolyl)-1,2,4,5-tetrahydro-7-oxo-7H-pyrazolo[1,2-d][1,4,5]oxadiazepin-9-yl pivalate
 CAS† Chemical Name: 8-(2,6-diethyl-4-methylphenyl)-1,2,4,5-tetrahydro-7-oxo-7H-pyrazolo[1,2-d][1,4,5]oxadiazepin-9-yl 2,2-dimethylpropanoate

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Pinoxaden Agrogill Technical Grade Active Ingredient has the following properties:

Property	Result
Colour and physical state	Off-white solid
Nominal concentration	99.2%
Odour	Pungent
Density	1.0 – 1.1 g/mL
Vapour pressure	2.05×10^{-7} Pa at 20°C
pH	4.76 for a 1% dilution
Solubility in water	0.203 g/L
n-Octanol/water partition coefficient	$\log K_{ow} = 3.02$

The required chemistry data for Pinoxaden Agrogill Technical Grade Active Ingredient 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 the information sufficient to support the registration of Pinoxaden Agrogill Technical Grade Active Ingredient.

References

PMRA

Document

Number	Reference
2913714	2018, Structural Formula Pinoxaden technical, DACO: 2.7 CBI
2913715	2018, Molecular Formula Pinoxaden, DACO: 2.8 CBI
2913716	2018, Molecular weight Pinoxaden, DACO: 2.9 CBI
2913717	2018, Summary of Manufacturing Process for Pinoxaden, DACO: 2.11.1 CBI
2913742	2018, Detailed manufacturing Process, DACO: 2.11.3 CBI
2913743	2018, Discussion on Formation of impurities, DACO: 2.11.4 CBI
2913744	2018, DACO 2.12.1 Establishing Certified Limits, DACO: 2.12.1 CBI
2913745	2017, Chemical Composition of Five batches of Pinoxaden technical Preliminary Analysis and Enforcement Analytical methods for Pinoxaden TGAI: Fullfilling the Requirements of OPPTS Guideline 830.1700 and 830.1800 and EU Commission regulation No., 283/2013, DACO: 2.13,2.13.1,2.13.2,2.13.3 CBI
2913746	2017, Pinoxaden technical: Laboratory study of Physical state, colour and odour, DACO: 2.14.1,2.14.2,2.14.3 CBI
2913747	2017, Pinoxaden technical: Laboratory study of Melting Point, DACO: 2.14.4 CBI
2913748	2017, Pinoxaden technical: Laboratory study of Density/Specific Gravity, DACO: 2.14.6 CBI
2913749	2017, Pinoxaden technical: Laboratory study of water solubility, DACO: 2.14.7 CBI
2913750	2018, Pinoxaden technical: Laboratory study of Solubility in Organic solvents, DACO: 2.14.8 CBI
2913751	2017, Pinoxaden technical: Laboratory study of Vapour Pressure, DACO: 2.14.9 CBI
2913752	2017, Pinoxaden technical: Laboratory study of Dissociation constant, DACO: 2.14.10 CBI
2913753	2017, Pinoxaden technical: Laboratory study of Partition coefficient, DACO: 2.14.11 CBI
2913754	2017, Pinoxaden technical: Laboratory study of UV/Visible absorption Spectrum and Molar Absorptivity, DACO: 2.14.12 CBI
2913755	2018, Pinoxaden technical: Accelerated storage stability at 54 plus minus 2 degree Celsius for 14 days, DACO: 2.14.13 CBI
2913756	2017, Pinoxaden technical: Laboratory study of pH, DACO: 2.14.15,830.7000 CBI
2913757	2018, DACO 2.15 Samples of Analytical standards, DACO: 2.15
2913758	2017, Pinoxaden technical: Determination of Active constituent with Full Method validation, DACO: 2.16 CBI
3000482	2019, Description of starting materials, DACO: 2.11.2 CBI
3000484	2019, Detailed Production process description revised including conditions for solvent recovery, DACO: 2.11.3 CBI
3000485	2019, Clarifications regarding the solvent and the internal standard used, DACO: 2.13.1 CBI
3000487	2019, Clarification on Batch data, DACO: 2.13.3 CBI

ISSN: 1911-8082

© Her Majesty the Queen in Right of Canada, represented by the Minister of Public Works and Government Services
Canada 2019

All rights reserved. No part of this information (publication or product) may be reproduced or transmitted in any form or by any means, electronic, mechanical photocopying, recording or otherwise, or stored in a retrieval system, without prior written permission of the Minister of Public Works and Government Services Canada, Ottawa, Ontario K1A 0S5.