

Evaluation Report for Category B, Subcategory 2.1, 2.3, 2.4 Application

Application Number: 2017-2005
Application: New EP Product Chemistry – Guarantee; Identity of Formulants;
Proportion of Formulants
Product: Pyrinex 450 LV EC
Registration Number: 33113
Active ingredient (a.i.): Chlorpyrifos
PMRA Document Number: 2858225

Purpose of Application

The purpose of the current application was to register the end-use product Pyrinex 450 LV EC for use on crops and non-crop plants to control insects.

Chemistry Assessment

Pyrinex 450 LV EC is formulated as an emulsifiable concentrate containing chlorpyrifos at a nominal concentration of 450 g/L. This end-use product has a density of 1.141 g/mL and pH of 4.05. The required chemistry data for Pyrinex 450 LV EC have been provided, reviewed and found to be acceptable.

Health Assessments

Pyrinex 450 LV EC is of moderate acute toxicity to rats via the oral route and of low acute toxicity to rats via the dermal and inhalation routes of exposure. It is mildly irritating to the eyes and non-irritating to the skin of rabbits and is not considered to be a potential skin sensitizer based on the results of a study in guinea pigs using the Buehler method.

The use of the end-use product Pyrinex 450 LV EC on various food crops, Lodgepole pine and non-crop areas adjacent to treated crops is not expected to result in potential occupational or bystander exposure over the previously registered use of chlorpyrifos. No risks of concern are expected when workers follow label directions and wear personal protective equipment as stated on the label.

No new residue data for chlorpyrifos in canola, flax, lentil, corn (field, sweet), strawberry, Asian radish (Lo Bok, Daikon), radish, celery, cucumber, green pepper, pak choi, broccoli, brussels sprout, cabbage, cauliflower, Chinese cabbage, Chinese broccoli, garlic, rutabaga, carrot, potato, sunflower, sugarbeet, barley, wheat, oats, onion (bulb, pickling), tobacco and filbert were submitted to support the registration of Pyrinex 450 LV EC. Previously reviewed residue chemistry data were reassessed in the framework of this petition.

The dietary exposure assessment on file is considered adequate to cover the residues of chlorpyrifos expected from the use of this new product. No health risks of concern have been identified for any segment of the population including infants, children, adults and seniors.

Environmental Assessment

An environmental assessment was not required for this application.

Value Assessment

Thirteen side-by-side field trials conducted against a variety of insect pests on canola, potatoes, lentils and cereals demonstrated equivalent efficacy of Pyrinex 450 LV EC compared to a registered product.

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 the end-use product Pyrinex 450 LV EC.

References

PMRA Document Number	Reference
2534304	2015, Chemistry-3.1.1-4, 3.5.4-5-Pyrinex 450 EC low VOC, DACO: 3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.5.4, 3.5.5
2534305	2011, Pyrinex 450 EC Product Chemistry, DACO: 3.2.1, 3.2.2, 3.2.3, 3.3.1, 3.4.1, 3.5.12, 3.5.13, 3.5.15 CBI
2534306	2010, Final Report for the Physical and Chemical Characteristics of Pyrinex 450 EC, DACO: 3.5.1, 3.5.11, 3.5.2, 3.5.3, 3.5.6, 3.5.7, 3.5.8, 3.5.9
2534307	2011, Storage Stability and Corrosion Characteristics of Pyrinex 450 EC, DACO: 3.5.10, 3.5.14 CBI
2755715	2017, Method Validation of Pyrinex 450 LV EC, DACO: 3.4.1 CBI
2534308	2011, Pyrinex 450 EC-Acute Oral Toxicity Study (UDP) in Rats, DACO: 4.6.1
2534309	2011, Pyrinex 450 EC-Acute Dermal Toxicity Study (UDP) in Rats, DACO: 4.6.2
2534310	2011, Pyrinex 450 EC-Acute Inhalation Toxicity Study in Rats, DACO: 4.6.3
2534311	2011, Pyrinex 450 EC-Acute Eye Irritation Study in Rabbits, DACO: 4.6.4
2534312	2010, Pyrinex 450 EC-Acute Dermal Irritation Study in Rabbits, DACO: 4.6.5
2534313	2011, Pyrinex 450 EC-Skin Sensitization Study in Guinea Pigs, DACO: 4.6.6
2534289	2015, Value Summary for Pyrinex 450 VOC, DACO: 10.1, 10.2.1, 10.2.2, 10.2.3, 10.2.3.1, 10.3.1, 10.3.2, 10.5.1, 10.5.2, 10.5.3, 10.5.4
2534290	2015, Summary of Trials Evaluating Pyrinex, DACO: 10.2.3, 10.2.3.1
2534291	2013, CAN-1_Pyrinex 480 VOC/canola, DACO: 10.2.3.3, 10.3.2
2534292	2013, CAN-2_Pyrinex 480 VOC/canola, DACO: 10.2.3.3, 10.3.2
2534293	2014, CAN-3_Pyrinex 450 VOC For Insect Control in Canola, DACO: 10.2.3.3, 10.3.2
2534294	2013, POT-1_Pyrinex 450 VOC/potato, DACO: 10.2.3.3, 10.3.2
2534295	2015, POT-2_Pyrinex 450 VOC/potato, DACO: 10.2.3.3, 10.3.2
2534296	2015, POT-3_Adama Pyrinex Potato Insecticide Report, DACO: 10.2.3.3, 10.3.2
2534297	2013, LENT-1_Pyrinex 480 VOC/Lentils, DACO: 10.2.3.3, 10.3.2
2534298	2013, LENT-2_CA-3736013-3-PyrinexVOC-lentils-KVFR-ID-final, DACO: 10.2.3.3, 10.3.2
2534299	2014, LENT-3_Pyrinex 450 g/L VOC formulation lentils, DACO: 10.2.3.3, 10.3.2
2534300	2013, CER-2_Pyrinex 480VOC/cereal, DACO: 10.2.3.3, 10.3.2
2534301	2013, CER-1_Pyrinex 480VOC/cereal, DACO: 10.2.3.3, 10.3.2
2534302	2014, Hard Red Wheat-1_Pyrinex 450 g/L VOC formulation cereals, DACO: 10.2.3.3, 10.3.2
2534303	2014, BAR-1_Pyrinex 450 g/L VOC formulation cereals, DACO: 10.2.3.3, 10.3.2

ISSN: 1911-8082

© Her Majesty the Queen in Right of Canada, represented by the Minister of Public Works and Government Services
Canada 2018

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.