



Health Canada Santé Canada

Your health and safety... our priority.

Votre santé et votre sécurité... notre priorité.

Proposed Registration Decision

PRD2010-27

Chlorantraniliprole

(publié aussi en français)

30 September 2010

This document is published by the Health Canada Pest Management Regulatory Agency. For further information, please contact:

Publications
Pest Management Regulatory Agency
Health Canada
2720 Riverside Drive
A.L. 6604-E2
Ottawa, Ontario
K1A 0K9

Internet: pmra.publications@hc-sc.gc.ca
healthcanada.gc.ca/pmra
Facsimile: 613-736-3758
Information Service:
1-800-267-6315 or 613-736-3799
pmra.infoserv@hc-sc.gc.ca

Canada 

HC Pub: 100489

ISBN: 978-1-100-16937-8 (978-1-100-16938-5)
Catalogue number: H113-9/2010-27^E (H113-9/2010-27E-PDF)

© Her Majesty the Queen in Right of Canada, represented by the Minister of Health Canada, 2010

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.

Table of Contents

Overview.....	1
Proposed Registration Decision for Chlorantraniliprole.....	1
What Does Health Canada Consider When Making a Registration Decision?.....	1
What Is Chlorantraniliprole?.....	2
Health Considerations.....	2
Environmental Considerations.....	4
Value Considerations.....	5
Measures to Minimize Risk.....	5
Next Steps.....	6
Other Information.....	6
Science Evaluation.....	7
1.0 The Active Ingredient, Its Properties and Uses.....	7
1.1 Physical and Chemical Properties of the Active Ingredients and End-Use Product.....	7
1.2 Directions for Use and Mode of Action.....	8
2.0 Methods of Analysis.....	8
3.0 Impact on Human and Animal Health.....	8
4.0 Impact on the Environment.....	8
5.0 Value.....	9
6.0 Pest Control Product Policy Considerations.....	9
6.1 Toxic Substances Management Policy Considerations.....	9
6.2 Formulants and Contaminants of Health or Environmental Concern.....	9
7.0 Summary.....	9
8.0 Proposed Regulatory Decision.....	10
List of Abbreviations.....	11
References.....	13

Overview

Proposed Registration Decision for Chlorantraniliprole

Health Canada's Pest Management Regulatory Agency (PMRA), under the authority of the *Pest Control Products Act* and Regulations, is proposing full registration for the sale and use of Rynaxypyr Technical Insecticide and the end-use products, DuPont Altacor Insecticide, DuPont Coragen Insecticide and DuPont Acelepryn Insecticide, containing the technical grade active ingredient chlorantraniliprole, to control a variety of insect pests in several agricultural crops and turf.

Rynaxypyr Technical Insecticide (Registration Number 28979) and the end-use products, DuPont Altacor Insecticide (previously Altacor 35 WG Insecticide), DuPont Coragen Insecticide (previously Coragen 200 SC Insecticide) and DuPont Acelepryn Insecticide (previously DPX-E2Y45 20 SC Insecticide) (Registration Numbers 28981, 28982 and 28980 respectively), are conditionally registered in Canada. The detailed review for Rynaxypyr Technical Insecticide and its related end-use products can be found in Evaluation Report ERC2008-03 - *Chlorantraniliprole*. The current applications were submitted to convert Rynaxypyr Technical Insecticide and its related end-use products from conditional registration to full registration.

An evaluation of available scientific information found that, under the approved conditions of use, the product has value and does not present an unacceptable risk to human health or the environment.

This Overview describes the key points of the evaluation, while the Science Evaluation provides detailed technical information on the human health, environmental and value assessments of chlorantraniliprole and DuPont Altacor Insecticide, DuPont Coragen Insecticide and DuPont Acelepryn Insecticide.

What Does Health Canada Consider When Making a Registration Decision?

The key objective of the *Pest Control Products Act* is to prevent unacceptable risks to people and the environment from the use of pest control products. Health or environmental risk is considered acceptable¹ if there is reasonable certainty that no harm to human health, future generations or the environment will result from use or exposure to the product under its proposed conditions of registration. The Act also requires that products have value² when used according to the label directions. Conditions of registration may include special precautionary measures on the product label to further reduce risk.

¹ "Acceptable risks" as defined by subsection 2(2) of the *Pest Control Products Act*.

² "Value" as defined by subsection 2(1) of the *Pest Control Products Act*: "the product's actual or potential contribution to pest management, taking into account its conditions or proposed conditions of registration, and includes the product's (a) efficacy; (b) effect on host organisms in connection with which it is intended to be used; and (c) health, safety and environmental benefits and social and economic impact."

To reach its decisions, the PMRA applies modern, rigorous risk-assessment methods and policies. These methods consider the unique characteristics of sensitive subpopulations in humans (e.g. children) as well as organisms in the environment (e.g. those most sensitive to environmental contaminants). These methods and policies also consider the nature of the effects observed and the uncertainties when predicting the impact of pesticides. For more information on how the PMRA regulates pesticides, the assessment process and risk-reduction programs, please visit the PMRA section of Health Canada's website at healthcanada.gc.ca/pmra.

Before making a final registration decision on chlorantraniliprole, the PMRA will consider all comments received from the public in response to this consultation document³. The PMRA will then publish a Registration Decision⁴ on chlorantraniliprole, which will include the decision, the reasons for it, a summary of comments received on the proposed final registration decision and the PMRA's response to these comments.

For more details on the information presented in this Overview, please refer to the Science Evaluation section of this consultation document.

What Is Chlorantraniliprole?

Chlorantraniliprole is an agricultural insecticide to be applied as a foliar application to control a variety of insect pests in several agricultural crops and turf. Currently, chlorantraniliprole is the only insecticide registered in Canada with this particular mode of action. It kills insects by overstimulating their muscles.

Health Considerations

Can Approved Uses of Chlorantraniliprole Affect Human Health?

Chlorantraniliprole is unlikely to affect your health when used according to label directions.

Exposure to chlorantraniliprole may occur through diet (food and water), when handling and applying the product, or through contact with residues on turf. When assessing health risks, two key factors are considered: the levels where no health effects occur and the levels to which people may be exposed. Toxicology studies in laboratory animals describe potential health effects from varying levels of exposure to a chemical and identify the dose where no effects are observed. The health effects noted in animals occur at doses more than 100 times higher (and often much higher) than levels to which humans are normally exposed when using chlorantraniliprole products according to label directions.

³ "Consultation statement" as required by subsection 28(2) of the *Pest Control Products Act*.

⁴ "Decision statement" as required by subsection 28(5) of the *Pest Control Products Act*.

The technical grade active ingredient chlorantraniliprole and its end-use products, DuPont Altacor Insecticide, DuPont Coragen Insecticide and DuPont Acelepryn Insecticide, are of low acute toxicity to animals after a single dose, are non-irritating to the skin and eyes, and do not cause an allergic skin reaction. Chlorantraniliprole did not cause cancer in animals and does not damage genetic material, such as DNA. There was no indication that chlorantraniliprole affects the immune or endocrine system, and there was no evidence that it causes damage to the nervous system in rats. When chlorantraniliprole was given to pregnant animals, there was no evidence that it affects the developing fetus.

The first signs of toxicity in animals given daily doses of chlorantraniliprole over longer periods of time were adaptive effects on the liver. At high doses, however, male mice did show signs of liver effects that were considered adverse. In some studies, the adrenal gland of male rats changed in appearance due to a slight increase in the amount of lipid droplets following exposure to chlorantraniliprole. However, this was not considered toxicologically significant.

The risk assessment protects against these effects by ensuring that the level of human exposure is well below the lowest dose at which these effects occurred in animal tests. The dose levels used to assess risks are established to protect the most sensitive human population (e.g. children and nursing mothers). Only those uses where exposure is well below levels that cause no effects in animal testing are considered acceptable for registration.

Residues in Water and Food

Dietary risks from food and water are not of concern.

Aggregate dietary intake estimates (food plus water) revealed that children 1 to 2 years old, the population group that would ingest the most chlorantraniliprole relative to body weight, are expected to be exposed to $\leq 1.3\%$ of the acceptable daily intake. Based on these estimates, the chronic dietary risk from chlorantraniliprole is not of concern for any segment of the population. Chlorantraniliprole is not carcinogenic; therefore, a chronic cancer dietary risk assessment is not required.

Animal studies revealed no acute health effects. Consequently, a single dose of chlorantraniliprole is not likely to cause acute health effects in the general population (including infants and children).

The *Food and Drugs Act* prohibits the sale of adulterated food, that is, food containing a pesticide residue that exceeds the established maximum residue limit (MRL). Pesticide MRLs are established for *Food and Drugs Act* purposes through the evaluation of scientific data under the *Pest Control Products Act*. Food containing a pesticide residue that does not exceed the established MRL does not pose an unacceptable health risk.

Residue trials conducted throughout Canada and the United States using chlorantraniliprole on apple, pear, peach, plum, sweet and sour cherries, grapes, broccoli/cauliflower, cabbage, mustard greens, cucumber, cantaloupe/muskmelon, summer squash, tomato, bell and non-bell peppers, head/leaf lettuce, celery, spinach, potato and cotton were acceptable. The MRLs for this active ingredient can be found in Evaluation Report ERC2008-03 – *Chlorantraniliprole*.

Risks in Residential and Other Non-Occupational Environments

Residential risks are not of concern when DuPont Coragen Insecticide or DuPont Acelepryn Insecticide is used according to the proposed label directions.

Individuals entering recreational areas, such as golf courses and parks, or home and residential lawns treated with DuPont Coragen Insecticide and DuPont Acelepryn Insecticide, can come in contact with foliar residues of chlorantraniliprole. However, subsequent risk to these individuals is considered negligible.

Occupational Risks From Handling DuPont Altacor Insecticide, DuPont Coragen Insecticide and DuPont Acelepryn Insecticide

Occupational risks are not of concern when DuPont Altacor Insecticide, DuPont Coragen Insecticide or DuPont Acelepryn Insecticide is used according to the proposed label directions, which include protective measures.

Farmers and pesticide applicators mixing, loading or applying DuPont Altacor Insecticide, DuPont Coragen Insecticide or DuPont Acelepryn Insecticide, as well as field workers re-entering freshly treated fields, can come in direct contact with chlorantraniliprole on the skin or through inhalation of spray mists. Therefore, the labels specify that anyone mixing, loading or applying DuPont Altacor Insecticide, DuPont Coragen Insecticide or DuPont Acelepryn Insecticide must wear a long-sleeved shirt, long pants and chemical-resistant gloves. Taking into consideration these label requirements, risk to farmers, applicators or field workers is not a concern.

For bystanders, exposure is expected to be much less than that of field workers and is considered negligible. Therefore, health risks to bystanders are not of concern.

Environmental Considerations

What Happens When Chlorantraniliprole Is Introduced Into the Environment?

Chlorantraniliprole enters the environment when used on various crops and turf for control of various insects. Although the use pattern of chlorantraniliprole does not include direct application to water, it can enter the aquatic environment through spray drift and runoff from treated fields. Chlorantraniliprole residues are not expected in the air because of its low volatility.

Chlorantraniliprole is persistent and mobile in soil and moderately persistent in the aquatic environment. The major breakdown product, (2-[3-Bromo-1-(3-chloro-2-pyridinyl)-1H-pyrazol-5-yl]-6-chloro-3,8-dimethyl-4(3H)-quinazolinone (IN-EQW78) is more persistent than chlorantraniliprole in the soil and aquatic environment. Chlorantraniliprole is expected to leach through the soil profile beyond 60 cm; therefore, it is expected to reach groundwater. In surface waters, chlorantraniliprole will partition to sediment and is expected to accumulate in aquatic systems. A Canadian field dissipation study in Prince Edward Island demonstrated that up to approximately 48% of applied chlorantraniliprole is expected to carry over to the following growing season.

The risk to the environment was assessed for chlorantraniliprole and the end-use products DuPont Altacor Insecticide, DuPont Coragen Insecticide and DuPont Acelepryn Insecticide. Use of chlorantraniliprole according approved product labels is not expected to present any risk to wild mammals, birds, earthworms, terrestrial plants, bees, fish, algae and aquatic plants. However, risks to some non-target terrestrial arthropods and aquatic invertebrates have been identified.

Value Considerations

What Is the Value of DuPont Altacor Insecticide, DuPont Coragen Insecticide and DuPont Acelepryn Insecticide?

DuPont Altacor Insecticide (35% chlorantraniliprole) is registered for the control of a variety of insect pests in pome fruits, stone fruits and grapes. DuPont Coragen Insecticide (200 g/L chlorantraniliprole) is registered to control many insect pests in potatoes, fruiting vegetables, *Brassica* vegetables, leafy vegetables and in turf. The control of several insect pests in turf is also supported on the DuPont Acelepryn Insecticide (200 g/L chlorantraniliprole) label.

Currently, chlorantraniliprole is the only insecticide registered in Canada with the ryanodine receptor modulator mode of action. Chlorantraniliprole represents another mode of action that can be used to control listed pests on pome fruits, stone fruits, grapes, potatoes, fruiting vegetables, *Brassica* vegetables, leafy vegetables and turf. This is important for integrated pest management and for resistance management strategies.

Measures to Minimize Risk

Labels of registered pesticide products include specific instructions for use. Directions include risk-reduction measures to protect human and environmental health. These directions must be followed by law.

The key risk-reduction measures being proposed on the labels of DuPont Altacor Insecticide, DuPont Coragen Insecticide and DuPont Acelepryn Insecticide to address the potential risks identified in this assessment are as follows.

Key Risk-Reduction Measures

Human Health

As users may come into direct contact with chlorantraniliprole on the skin or through inhalation of spray mists, anyone mixing, loading or applying DuPont Altacor Insecticide, DuPont Coragen Insecticide and DuPont Acelepryn Insecticide must wear a long-sleeved shirt, long pants and chemical-resistant gloves.

Because individuals can come into contact with treated foliage when re-entering treated residential areas, re-entry into treated areas is restricted for 12 hours after application.

Environment

To address the concerns related to carryover, runoff, leaching, and risk to non-target arthropods, environmental hazard label statements are required for DuPont Altacor Insecticide, DuPont Coragen Insecticide and DuPont Acelepryn Insecticide. To protect aquatic organisms, spray buffer zones of one to ten metres are required for ground applications and one to fifteen metres for aerial applications. The distance allowed depends on the type of spray equipment used and the timing of application.

Next Steps

Before making a final registration decision on chlorantraniliprole, the PMRA will consider all comments received from the public in response to this consultation document. The PMRA will accept written comments on this proposal up to 45 days from the date of publication of this document. Please forward all comments to Publications (contact information on the cover page of this document). The PMRA will then publish a Registration Decision, which will include its decision, the reasons for it, a summary of comments received on the proposed final decision and the Agency's response to these comments.

Other Information

When the PMRA makes its registration decision, it will publish a Registration Decision on chlorantraniliprole (based on the Science Evaluation of this consultation document). In addition, the test data referenced in this consultation document will be available for public inspection, upon application, in the PMRA's Reading Room (located in Ottawa).

Science Evaluation

Chlorantraniliprole

1.0 The Active Ingredient, Its Properties and Uses

1.1 Physical and Chemical Properties of the Active Ingredients and End-Use Product

Technical Product—Chlorantraniliprole Technical

Common Name: 3-bromo-N-[4-chloro-2-methyl-6-(methylcarbamoyl)phenyl]-1-(3-chloropyridin-2-yl)-1H-pyrazole-5-carboxamide

Chemical Name: Chlorantraniliprole

Rynaxypyr Technical Insecticide has the following properties:

Property	Result										
Colour and physical state	Brown powder										
Nominal concentration	97%										
Odour	Odourless										
Density at 20°C	1.5189 g/mL										
Vapour pressure	6.3 x 10 ⁻¹² Pa (estimated) The experimental result was < 6.804 x 10 ⁻⁷ Pa at 80°C by test guideline OECD 104. Since the vapour pressure was too low to be determined, the value was estimated to be 6.3 x 10 ⁻¹² Pa at 20°C and 2.1 x 10 ⁻¹¹ Pa at 25°C.										
pH	5.77 (1% dispersion)										
Solubility in water	<table><thead><tr><th>pH</th><th>solubility (mg/L)</th></tr></thead><tbody><tr><td>deionized water</td><td>1.023</td></tr><tr><td>4</td><td>0.972</td></tr><tr><td>7</td><td>0.880</td></tr><tr><td>9</td><td>0.971</td></tr></tbody></table>	pH	solubility (mg/L)	deionized water	1.023	4	0.972	7	0.880	9	0.971
pH	solubility (mg/L)										
deionized water	1.023										
4	0.972										
7	0.880										
9	0.971										
n-Octanol/water partition coefficient (K _{ow})	<table><thead><tr><th>pH</th><th>log K_{ow}</th></tr></thead><tbody><tr><td>Milli-RO water</td><td>2.76</td></tr><tr><td>4</td><td>2.77</td></tr><tr><td>7</td><td>2.86</td></tr><tr><td>9</td><td>2.80</td></tr></tbody></table>	pH	log K _{ow}	Milli-RO water	2.76	4	2.77	7	2.86	9	2.80
pH	log K _{ow}										
Milli-RO water	2.76										
4	2.77										
7	2.86										
9	2.80										

The chemistry requirements for Rynaxypyr Technical Insecticide have been completed.

End-Use Products— DuPont Altacor Insecticide, DuPont Coragen Insecticide and DuPont Acelepryn Insecticide

DuPont Acelepryn Insecticide and DuPont Coragen Insecticide, formulated as suspension concentrates contain chlorantraniliprole at a nominal concentration of 200 g/L. These end-use products have a density of 1.084-1.104 g/mL and a pH of 7.8. The chemistry requirements for DuPont Acelepryn Insecticide and DuPont Coragen Insecticide are complete.

DuPont Altacor Insecticide is formulated as a wettable granule containing chlorantraniliprole at a nominal concentration of 35%. This end-use product has a density of 0.74-0.82 g/mL and pH of 9.4. The chemistry requirements for DuPont Altacor Insecticide are complete.

Please refer to the Evaluation Report ERC2008-03 - *Chlorantraniliprole* for detailed information on the chemistry assessment of Rynaxypyr Technical Insecticide and its related end-use products, DuPont Altacor Insecticide, DuPont Coragen Insecticide and DuPont Acelepryn Insecticide.

1.2 Directions for Use and Mode of Action

Please refer to the Evaluation Report ERC2008-03 – *Chlorantraniliprole* for detailed information on the directions for use and the mode of action.

2.0 Methods of Analysis

Please refer to the Evaluation Report ERC2008-03 - *Chlorantraniliprole* for detailed information on the methods of analysis of Rynaxypyr Technical Insecticide and its related end-use products, DuPont Altacor Insecticide, DuPont Coragen Insecticide and DuPont Acelepryn Insecticide.

3.0 Impact on Human and Animal Health

There were no outstanding toxicology, food residue or occupational exposure data requirements to support the conversion from conditional to full registration. Please refer to the Evaluation Report ERC2008-03 – *Chlorantraniliprole* for detailed information on the toxicology, food residue and occupational exposure risk assessments.

4.0 Impact on the Environment

There were no outstanding environmental data requirements to support the conversion from conditional to full registration. Please refer to the Evaluation Report ERC2008-03 for detailed information on the environmental risk assessment.

5.0 Value

Based on the confirmatory data submitted and the uses already present on the currently registered label, the use of DuPont Altacor Insecticide for control of peach twig borer at a rate of 215 to 285 g product per hectare for a maximum of 3 applications per season, without exceeding a total of 645 g product/ha/season is supported. Reapplication should be no more than once every 7 days.

Please refer to Evaluation Report ERC2008-03 - *Chlorantraniliprole* for value of other registered uses.

6.0 Pest Control Product Policy Considerations

6.1 Toxic Substances Management Policy Considerations

The Toxic Substances Management Policy (TSMP) is a federal government policy developed to provide direction on the management of substances of concern that are released into the environment. The TSMP calls for the virtual elimination of Track 1 substances [those that meet all four criteria outlined in the policy, i.e., persistent (in air, soil, water and/or sediment), bio-accumulative, primarily a result of human activity and toxic as defined by the *Canadian Environmental Protection Act*], and CEPA-toxic or equivalent.

Refer to Evaluation Report ERC2008-03 – *Chlorantraniliprole* for an assessment of the TSMP considerations.

6.2 Formulants and Contaminants of Health or Environmental Concern

Please refer to Evaluation Report ERC2008-03 – *Chlorantraniliprole* for an assessment of the formulants and contaminants of health or environmental concerns.

7.0 Summary

The data submitted as a condition of registration indicate that applications of chlorantraniliprole significantly reduced the percentage of fruit and the number of shoots damaged by peach twig borer when compared to the untreated control. Based on these data and the uses already present on the currently registered label, the use of DuPont Altacor Insecticide for control of peach twig borer at a rate of 215 to 285 g product per hectare for a maximum of 3 applications per season, without exceeding a total of 645 g product/ha/season is supported. Reapplication should be no more than once every 7 days.

Please refer to Evaluation Report ERC2008-03 – *Chlorantraniliprole* for a summary of the impacts of chlorantraniliprole on human health and safety, the environmental risk of chlorantraniliprole, and the additional value of the end-use products, DuPont Altacor Insecticide, DuPont Coragen Insecticide and DuPont Acelepryn Insecticide.

8.0 Proposed Regulatory Decision

Health Canada's PMRA, under the authority of the *Pest Control Products Act* and Regulations, is proposing full registration for the sale and use of Rynaxypyr Technical Insecticide and the end-use products, DuPont Altacor Insecticide, DuPont Coragen Insecticide and DuPont Acelepryn Insecticide, containing the technical grade active ingredient chlorantraniliprole, to control a variety of insect pests in several agricultural crops and turf.

Acceptable confirmatory efficacy data to support a control claim against peach twig borer on stone fruit were provided. No additional data for the value assessment are required.

An evaluation of available scientific information found that, under the approved conditions of use, the product has value and does not present an unacceptable risk to human health or the environment.

List of Abbreviations

CEPA	Canadian Environmental Protection Act
d	day(s)
DNA	deoxyribonucleic acid
g	gram
K_{ow}	<i>n</i> -octanol-water partition coefficient
L	litre
mg	milligram
mL	millilitre
MRL	maximum residue limit
OECD	Organisation for Economic Co-operation and Development
Pa	Pascals
PMRA	Pest Management Regulatory Agency
TSMP	Toxic Substances Management Policy

References

A. List of Studies/Information Submitted by Registrant

1.0 Chemistry

PMRA Number	Reference
1332057	2006, Validation of the HPLC/UV analytical method for DPX-E2Y45 in DPX-E2Y45 35WG and DPX-E2Y45 200 g/L SC (18.4%) end-use products, DACO: 3.4.1
1332058	2006, Determination of DPX-E2Y45 in DPX-E2Y45 formulation end-use products - Reversed-phase liquid chromatographic assay method, DACO: 3.4.1
1332061	2006, DPX-E2Y45 35WG water-dispersible granular insecticide formulation: Summary report of laboratory study of physical and chemical characteristics, DACO: 3.5.1,3.5.10,3.5.11,3.5.12,3.5.13, 3.5.14,3.5.15, 3.5.2,3.5.3,3.5.6, 3.5.7,3.5.8,3.5.9
1332097	2006, Product Identity and Composition of End-Use Product DPX-E2Y45 35WG, DACO: 3.1.3,3.1.4
1332099	2006, Product Identity and Composition of End-Use Product DPX-E2Y45 35WG, DACO: 3.2.1,3.2.2,3.2.3,3.3.1 CBI
1365905	2006, DPX-E2Y45 35WG water-dispersible granular insecticide formulation: Laboratory study of physical and chemical properties, DACO: 3.5.1,3.5.10,3.5.2,3.5.3,3.5.6,3.5.7,IIIA 2.1,IIIA 2.4.2,IIIA 2.6.2,IIIA 2.7.1,IIIA 2.7.3,IIIA 2.8.1,IIIA 2.8.2,IIIA 2.8.
1365906	2006, DPX-E2Y45 35WG water-dispersible granular insecticide formulation: Laboratory study of explosive and oxidizing properties, flammability of solids, and the relative self-ignition (autoflammability) temperature, DACO: 3.5.11,3.5.12,3.5.8,IIIA 2.2.1,I
1365909	2006, Validation of the HPLC/UV analytical method for DPX-E2Y45 in DPX-E2Y45 35WG and DPX-E2Y45 200 g/L SC (18.4%) end-use products, DACO: 3.4.1,IIIA 5.2.1
1365911	2006, Determination of DPX-E2Y45 in DPX-E2Y45 formulation end-use products - Reversed-phase liquid chromatographic assay method, DACO: 3.4.1,IIIA 5.2.1
1366013	2006, DPX-E2Y45 200 g/liter suspension concentrate (SC) insecticide formulation (18.4% a.i.): Laboratory study of physical and chemical properties, DACO: 3.5.1,3.5.10,3.5.11,3.5.2,3.5.3,3.5.6,3.5.7,3.5.9,IIIA 2.1,IIIA 2.3.1,IIIA 2.4.2,IIIA 2.5.2,IIIA 2.6

-
- 1366016 2006, DPX-E2Y45 200 g/liter suspension concentrate (SC) insecticide formulation (18.5% a.i.): Laboratory study of explosive properties, DACO: 3.5.12,IIIA 2.2.1
- 1366017 2006, DPX-E2Y45: 200 g/L suspension concentrate (SC) insecticide formulation (18.5% w/w): Laboratory study of oxidising properties and auto-ignition temperature of liquids, DACO: 3.5.11,3.5.8,IIIA 2.2.2,IIIA 2.3.3
- 1366020 2006, Validation of the HPLC/UV analytical method for DPX-E2Y45 in DPX-E2Y45 35WG and DPX-E2Y45 200 g/L SC (18.4%) end-use products, DACO: 3.4.1,IIIA 5.2.1
- 1366022 2006, Determination of DPX-E2Y45 in DPX-E2Y45 formulation end-use products - Reversed-phase liquid chromatographic assay method, DACO: 3.4.1,IIIA 5.2.1
- 1444525 2007, Chlorantraniliprole 35WG (DPX-E2Y45 35WG) Water-dispersible granular formulation Annex IIIA: Section 1: Identity of the plant protection product, physical, chemical and technical properties of the plant protection product; Data on application; f
- 1444526 2007, Chlorantraniliprole 35WG (DPX-E2Y45 35WG) Water-dispersible granular formulation Annex IIIA: Section 1: Identity of the plant protection product, physical, chemical and technical properties of the plant protection product; Data on application
- 1444527 2007, DPX-E2Y45 35WG water-dispersible granular insecticide formulation: Laboratory study of physical and chemical properties, DACO: 3.5.1,3.5.10,3.5.3,3.5.6,3.5.7
- 1790227 2007, DPX-E2Y45 35WG Extruded water dispersible granular insecticide formulation: Laboratory study of storage stability and corrosion characteristics, DACO: 3.5.10,3.5.14
- 1790230 2008, DPX E2Y45 35WG water-dispersible granular insecticide formulation: laboratory study of storage stability and corrosion characteristics, DACO: 3.5.10,3.5.14
- 1790250 2007, DPX-E2Y45 18.4SC (200g/liter) suspension concentrate end-use product insecticide formulation: laboratory study of storage stability and corrosion characteristics, DACO: 3.5.10,3.5.14
- 1791314 2008, Batch Analysis Of DPX-E2Y45 Technical, DACO: 2.13.3
- 1791315 2008, Batch Analysis Of DPX-E2Y45 Technical, DACO: 2.13.3 CBI
- 1791316 2008, Batch Chromatograms From The Batch Analysis Of DPX-E2Y45 Technical, DACO: 2.13.3
-

1791317	2008, Batch Chromatograms From The Batch Analysis Of DPX-E2Y45 Technical, DACO: 2.13.3 CBI
1791318	2008, Batch Analysis Of DPX-E2Y45 Technical, DACO: 2.13.3
1791319	2008, Batch Analysis Of DPX-E2Y45 Technical, DACO: 2.13.3 CBI
1791321	2008, Batch Chromatograms From The Batch Analysis Of DPX-E2Y45 Technical, DACO: 2.13.3
1791329	2008, Batch Chromatograms From The Batch Analysis Of DPX-E2Y45 Technical, DACO: 2.13.3 CBI

2.0 Value

PMRA Number Reference

1790228	2009, Submission to support full registration of DuPont Altacor Insecticide for use on stone fruit group for peach twig borer control, DACO: 10.1,10.2,10.2.1,10.2.2,10.2.3,10.2.3.1,10.2.3.3,10.2.3.3(C),10.3,10.3.1,10.3.2,10.3.2(B)
1790229	2009, Assessment type(s) , DACO: 10.2.3.1,10.3.1