



Evaluation Report for Category B, Subcategory 3.12 Application

Application Number: 2014-1004
Application: Changes to product labels – New site or host
Product: DuPont Exirel Insecticide
Registration Number: 30895
Active ingredients (a.i.): Cyantraniliprole
PMRA Document Number: 2544402

Background

DuPont Exirel Insecticide (Registration Number 30895; guarantee: 100 g/L cyantraniliprole) is currently fully registered for the control of various insect pests in pome fruit, stone fruit, tree nuts and vegetables (corn and tuberous, bulb, leafy, cucurbit, brassica, and fruiting).

Purpose of Application

The purpose of this application was to amend the label of DuPont Exirel Insecticide to include root and legume vegetables, low-growing berries, peanuts, and tobacco. This application was a Joint Review with the USEPA.

Chemistry Assessment

A chemistry assessment was not required for this application.

Health Assessments

A toxicology assessment was not required for this application.

Occupational exposures to the use of DuPont Exirel Insecticide on root and legume vegetables, low-growing berries, peanuts, and tobacco fit within the registered use pattern of cyantraniliprole. The potential exposures of mixers, loaders, applicators, post-application re-entry workers, and bystanders are not expected to exceed the current exposures to registered cyantraniliprole products. No risks of concern are expected when following label instructions and precautions, including wearing the personal protective equipment identified on the label.

Residue data from field trials conducted in Canada and the United States were submitted to support the domestic use of DuPont Exirel Insecticide 100 g/L SE on crops within Crop Sub-Group 1B (CSG1B), Crop Group 2 (CG2), Crop Group 6 (CG6 - including soybeans), Crop Sub-

Group13-07H (CSG13-07H), and peanuts. Cyantraniliprole was applied to the various crops at the approved GAP rate and harvested according to label directions.

The recommendation for maximum residue limits (MRLs) for cyantraniliprole was based upon the submitted field trial data, and the guidance provided in the [OECD MRL Calculator](#). MRLs to cover residues of cyantraniliprole in/on crops and processed commodities are proposed as shown in Table 1. Residues in processed commodities not listed in Table 1 are covered under the proposed MRLs for the raw agricultural commodities (RACs).

Commodity	Application Method/ Total Application Rate (g ai/ha)	PHI (days)	Residues (ppm)		Experimenta l Processing Factor	Currently Establishe d MRL (ppm)	Recommen ed MRL (ppm)
			Min	Max			
Leaves of root and tuber vegetables (CG2)	440-446	1	2.10 0	25.00 0	None	0.04	40
Edible-podded legume vegetables (CSG6A)	444-458	1	0.25 0	0.830	None	None	2.0
Dried shelled pea and bean (CSG6C)	446-457	6-7	0.01 1	0.670	None	None	1.0
Root vegetable, except sugar beet (CSG1B)	448-454	1	0.02 9	0.200	None	CSG1A: 0.02	0.4
Dry soybeans	397-411	5-8	<0.0 1	0.260	None	None	0.4
Succulent shelled pea and beans (CSG6B)	451-460	1	0.01 8	0.100	None	None	0.2
Low growing berry, except strawberry (CSG13-07H)	457	12-15	<0.0 1	0.043	None	None	0.08
Peanuts	438-499	13-15	<0.0 1	<0.01	None	None	0.01

Based on the dietary burden and residue data, MRLs of 0.1 ppm in fat and meat of cattle, goats, horses, and sheep, 0.2 ppm in milk, and 0.4 ppm in meat byproducts of cattle, goats, horses, and sheep to cover residues of cyantraniliprole are also proposed to replace the current MRL of 0.01 ppm.

Environmental Assessment

No additional risk to the environment resulting from the expansion of DuPont Exirel Insecticide to include root and legume vegetables, low-growing berries, peanuts, and tobacco, is expected. Environmental concerns are mitigated through adequate statements on the product label, with the addition of label statements regarding chemigation application.

Value Assessment

Value information submitted in support of the addition of new crop groups and pests to the DuPont Exirel Insecticide label included scientific rationales to extrapolate new label claims for root vegetables except sugar beet (Crop Sub-Group 1B), legume vegetables (Crop Group 6), peanuts, and tobacco from previously registered control claims on other crop groups. In addition, efficacy trials were submitted to support label claims for which extrapolation from previously registered claims was not possible. The trials which were provided for legume vegetables (Crop Group 6) included five efficacy trials to support control of soybean aphid and four trials to support suppression of bean leaf beetles. For low growing berries except strawberry (Crop Sub-Group 13-07H), submitted trials included three trials to support control of cranberry fruitworm, two to support control of sparganothis fruitworm, and one trial to support control of black headed fireworm.

Based on the submitted rationale to extrapolate new pest claims from previously registered label claims and the submitted trials, the following claims are supported:

- control of cabbage looper (250 mL product per ha), armyworm, beet armyworm, and fall armyworm (500 mL product per ha), variegated cutworm (500 to 750 mL product per ha), corn earworm, European corn borer (500 to 750 mL product per ha), aphids (500 to 1500 mL product per ha) and flea beetles (500 to 1000 mL product per ha) for root vegetables except sugar beet (Crop Sub-Group 1B) ;
- control of cabbage looper (250 to 500 mL product per ha), armyworm, fall armyworm, and beet armyworm (500 mL product per ha), cutworms and European corn borer (500 to 700 mL product per ha), and soybean aphids (500 to 1500 mL product per ha); and suppression of bean leaf beetles (1000 to 1500 mL product per ha) in legume vegetables (Crop Group 6);
- control of armyworm and fall armyworm (500 mL product per ha), cutworms (500 to 700 mL product per ha), and corn earworm (750 mL product per ha) in peanuts;
- control of tobacco hornworm and tomato hornworm (750 mL product per ha), and flea beetles (500 to 1000 mL product per ha) in tobacco;
- control of cranberry fruitworm, sparganothis fruitworm, and black headed (750 to 1500 mL product per ha) in low growing berries (except strawberry) (Crop Sub-Group 13-07H).

Conclusion

The PMRA has complete a review of available information provide in support of DuPont Exirel

Insecticide, and deemed it sufficient to support the amendment of the DuPont Exirel Insecticide label to include root and legume vegetables, low-growing berries, peanuts, and tobacco.

References

A. Unpublished Studies or information submitted by the applicant

PMRA Document Number	Reference
2412056	2014, Use Description/Scenario for use of Cyantraniliprole on Additional Vegetable and Field Crops, DACO: 5.2
2404837	2011, Cyantraniliprole: Magnitude of the Residues in Cranberries, USA, DACO: 7.4.1.
2404840	2012, Magnitude of the Residue and Metabolite Residues in Peanuts Following Soil Applications of DPX-HGW86 200 G/L SC and Foliar Applications of DPX-HGW86 100 G/L OD - USA, 2011, DACO: 7.4.1
2404843	2013, Magnitude of DPX-HGW86 and Metabolite Residues in Legume Vegetables (Soybeans) Following Foliar Applications of DPX-HGW86 100 G/L OD - USA, 2011/2012, DACO: 7.4.1
2404844	2013, Magnitude and Decline of DPX-HGW86 and Metabolite Residues in Legume Vegetables (Edible-Podded Beans/Peas, Succulent Shelled Beans/Peas, and Dry Shelled Beans/Peas) Following Foliar Applications of DPX-HGW86 100 G/L SE and DPX-HGW86 100 G/L OD -- USA, 2011, DACO: 7.4.1
2404846	2012, Magnitude of DPX-HGW86 and Metabolite Residues in Leaves of Root and Tuber Vegetables (Turnips and Sugar/Garden Beets) Following Foliar Applications of DPX-HGW86 100 G/L SE - USA, 2011, DACO: 7.4.1
2404848	2014, Cyantraniliprole: Magnitude of the Residues on Carrot, DACO: 7.4.1
2404849	2013, Cyantraniliprole: Magnitude of the Residues on Radish, DACO: 7.4.1
2404736	2014, Cyantraniliprole: Relative Residues for Different Application Method Treatment Regimes, DACO: 7.8
2404737	2014, Cyantraniliprole Formulated Product Residue Bridging, DACO: 7.8
2404813	2014, Biological Assessment Dossier for Cyantraniliprole 100 G/L SE Tier II Crop Addition - Canada, 2014, DACO: 10.1, 10.2, 10.2.1, 10.2.2, 10.2.3, 10.2.3.1, 10.2.3.3, 10.3.1, 10.3.3

2404814	2013, Efficacy and Tolerance of Cyazypyr 10 SE (cyantraniliprole) for Control of Cranberry Fruitworm, Blackheaded Fireworm and Sparganothis Fruitworm on Cranberries, DACO: 10.1, 10.2, 10.2.1, 10.2.2, 10.2.3, 10.2.3.1, 10.2.3.3, 10.3.1, 10.3.3
2404817	2013, Small-Scale Trial (Field) Reports, DACO: 10.2.3.3
2404821	2013, DACO 10.6 References, DACO: 10.6
2404824	2013, Cranberry Efficacy Summary Tables AAFC, DACO: 10.2.3.1
2404830	2014, Summary Tables Soybean Aphid, DACO: 10.2.3.1
2404833	2014, Summary Tables Bean Leaf Beetle, DACO: 10.2.3.1

B. Additional Information Considered

PMRA Document Number	Reference
2115788	2011a. Agricultural Reentry Task Force (ARTF). 2008. Data Submitted by the ARTF to Support Revision of Agricultural Transfer Coefficients. Submission #2006-0257. CBI

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