



Australian Government
**Australian Pesticides and
Veterinary Medicines Authority**



TRADE ADVICE NOTICE

on Chlorantraniliprole in the Product Du Pont Coragen Insecticide

APVMA Product Number P61519

ISSUED APRIL 2012, AMENDED MAY 2012

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On 11 May 2012, we issued an amended Trade Advice Notice for this product to correct an editorial error with the proposed maximum residue level (MRL) in FM 0183 milk fats from 0.03 to 0.1 mg/kg (page 7). This editorial error does not affect the risk profile discussed in the TAN and was originally included correctly as 0.1 mg/kg in Table 4 which compares the proposed MRL with those established internationally.

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PREFACE

The Australian Pesticides and Veterinary Medicines Authority (APVMA) is the Australian Government regulator with responsibility for assessing and approving agricultural and veterinary chemical products prior to their sale and use in Australia.

The APVMA has a policy of encouraging openness and transparency in its activities and of seeking stakeholder involvement in decision making. Part of that process is the publication of Trade Advice Notices for proposed extensions of use for existing chemicals where there may be trade implications, as defined in *Ag MORAG: Manual of Requirements and Guidelines* Part 5B.

About this document

This is a re-issued Trade Advice Notice, updated from a notice originally published in April 2012.

It indicates that the Australian Pesticides and Veterinary Medicines Authority (APVMA) is considering an application to vary the use of an existing registered agricultural or veterinary chemical. It provides a summary of the APVMA's residue and trade assessment.

Comment is sought from industry groups and stakeholders on the information contained within this document.

Making a submission

The APVMA invites any person to submit a relevant written submission as to whether the application for the registration of **Du Pont Coragen Insecticide** containing the existing active constituent chlorantraniliprole be granted. Submissions should relate only to matters that the APVMA is required by legislation to take into account in deciding whether to grant the application. In relation to this document, these grounds relate to the **trade implications** of the extended use of the product. Comments received outside these grounds cannot be considered by the APVMA.

Submissions must be received by the APVMA by close of business on **Monday, 21st May 2012** and be directed to the contact listed below. All submissions to the APVMA will be acknowledged in writing via email or by post.

Relevant comments will be taken into account by the APVMA in deciding whether to grant the application and in determining appropriate conditions of registration and product labelling.

When making a submission please include:

- Contact name
- Company or Group name (if relevant)
- Postal Address
- Email Address (if available)

- The date you made the submission.

All personal and **confidential commercial information (CCI)**¹ material contained in submissions will be treated confidentially.

Written submissions on the APVMA's proposal to grant the application for registration that relate to the **grounds for registration** should be addressed in writing to:

Contact Officer, Pesticides
Pesticides Program
Australian Pesticides and Veterinary Medicines Authority
PO Box 6182
Kingston ACT 2604

Phone: (02) 6210 4748

Fax: (02) 6210 4776

Email: pesticides@apvma.gov.au

Further information

Further information can be obtained via the contact details provided above.

Further information on trade advice notices can be found on the APVMA website: <http://www.apvma.gov.au>

¹ A full definition of "confidential commercial information" is contained in the Agvet Code.

1 INTRODUCTION

The Australian Pesticides and Veterinary Medicines Authority (APVMA) has before it an application from Du Pont Australia Limited for the extension of use of the product, Du Pont Coragen Insecticide, containing 200 g/L chlorantraniliprole, to legume vegetables and sweet corn as well as making minor changes to the registered use in cucurbits. The proposed use requires establishment of higher MRLs for chlorantraniliprole in animal commodities.

The potential for chlorantraniliprole residues in meat and dairy products to unduly prejudice trade is discussed below.

2 TRADE CONSIDERATIONS

2.1 Commodities exported

Legume vegetables, cucurbits and sweet corn are not considered to be major export commodities. However, animal commodities derived from livestock fed on sweet corn or legume forage or fodder are considered to be major export commodities.

2.2 Destination and value of exports

The significant export markets for Australian meat, kidney and liver are listed in Appendix 3 of Part 5B of Ag MORAG. The destination and value of Australian dairy exports are summarised in Table 1 below.

Table 1: Destination and value of Australian dairy exports

DESTINATION	VALUE OF AUSTRALIAN EXPORTS OF DAIRY PRODUCTS, BY DESTINATION (\$ MILLION)						
	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
CHEESE							
China	10.4	9.7	12.4	18.5	14.2	22.8	30.2
Japan	378.9	298.5	337.9	426.7	398.9	357.6	355.8
Korea	38.7	36.2	32.0	32.6	39.6	28.0	36.8
Saudi Arabia	81.5	103.5	86.7	89.7	30.6	29.8	31.7
United States	45.4	54.2	52.7	37.2	59.7	19.7	12.3
Other	321.8	335.1	302.5	363.8	253.1	257.4	265.5
TOTAL	876.7	837.2	824.2	968.4	796.1	715.3	732.2
BUTTER AND BUTTER FAT							
Egypt	10.5	12.5	13.9	5.0	22.0	17.5	6.3
Malaysia	11.6	15.8	11.0	17.4	14.0	17.6	18.5
Philippines	2.8	5.4	3.2	2.4	8.6	7.3	27.4
Singapore	16.8	21.1	14.4	26.2	20.2	21.3	27.9
Thailand	13.5	12.0	9.8	13.9	10.1	9.2	14.5
Other	133.2	157.9	126.2	129.6	157.3	138.2	156.9

TOTAL	188.5	224.7	178.6	194.6	232.1	211.1	251.6
SKIM MILK POWDER							
China	21.0	14.0	22.6	33.6	39.2	21.6	37.1
Malaysia	64.2	77.1	72.2	63.4	49.0	21.7	26.8
Philippines	49.4	72.0	46.1	64.1	99.7	49.5	31.2
Singapore	57.8	56.1	67.1	61.8	54.0	48.8	51.6
Thailand	21.7	76.8	51.1	48.6	33.3	27.5	37.9
Other	206.0	232.8	245.8	261.8	277.4	189.4	319.9
TOTAL	420.1	528.9	505.0	533.2	552.9	358.5	504.5
CASEIN							
Japan	23.1	30.4	31.8	38.4	43.6	26.4	22.0
United States	56.6	27.3	32.4	42.2	29.5	22.8	13.1
Other	36.5	31.3	49.3	44.2	34.4	38.6	17.5
TOTAL	116.2	89.0	113.5	124.8	107.5	87.8	52.7
WHOLEMILK POWDER							
China	3.5	6.9	2.4	21.1	48.0	37.9	51.6
Indonesia	25.1	34.4	27.6	31.6	45.9	28.5	39.7
Malaysia	33.1	23.8	14.5	27.3	14.9	6.2	3.9
Singapore	30.9	44.6	41.4	88.9	77.0	53.6	58.4
Taiwan	31.5	22.8	13.5	11.8	9.3	7.2	13.6
Other	200.4	201.1	175.4	211.4	280.3	162.9	235.4
TOTAL	324.4	333.6	274.9	392.2	475.3	296.3	402.5
OTHER PRODUCTS							
Fresh milk	108.8	107.3	96.3	83.6	102.1	91.3	96.4
Other fresh products	9.1	6.3	11.8	12.0	0.4	1.2	1.3
Condensed milk	139.8	147.5	156.9	152.4	158.9	123.6	108.2
Other powders	248.3	241.5	211.0	247.4	249.7	149.1	125.0

TOTAL	506.0	502.6	476.0	495.5	511.1	365.3	331.0
TOTAL DAIRY PRODUCTS	2,432	5,516	2,372	2,709	2,675		

Source: ABARE, Agricultural Commodity Statistics 2011, Canberra

2.3 Proposed Australian use-pattern

The proposed Australian use pattern for Du Pont Coragen Insecticide is summarised below.

Table 2: Proposed use pattern

Du Pont Coragen Insecticide (200 g/L chlorantraniliprole)

Crop	Pest	Rate	Critical Comments
Fruiting vegetables (cucurbits) including: Cucumbers Melons Pumpkin Squash Zucchini	Cotton bollworm (<i>Helicoverpa armigera</i>) Cucumber moth (<i>Diaphania indica</i>) Native budworm (<i>Helicoverpa punctigera</i>) Cluster caterpillar (<i>Spodoptera litura</i>)	100 mL (20 g a.i.) or 10 mL/100 L, i.e. 2 g a.i./100 L (dilute) (+ 15 g ai/hL of non-ionic surfactant)	Apply with a minimum spray interval of 5 days.
Legume vegetables including: Green beans Green peas Processing peas Snow peas Sugar snap peas	Cotton bollworm (<i>Helicoverpa armigera</i>) Native budworm (<i>Helicoverpa punctigera</i>)	100 mL (20 g a.i.) (+ 15 g ai/hL of non-ionic surfactant)	
Sweet corn	Cotton bollworm (<i>Helicoverpa armigera</i>)	100 mL (20 g a.i.) (+ 15 g ai/hL of non-ionic surfactant)	Ensure spray timing coincides with egg laying/hatching. Larvae entrenched in cobs at the time of spraying will not be controlled.

WITHHOLDING PERIOD

Harvest:

Fruiting vegetables (cucurbits) and legume vegetables: DO NOT harvest for 1 day after application.

Sweet corn: DO NOT harvest for 7 days after application.

Grazing:

*Legume vegetables : DO NOT graze or cut for stock food for 1 day after application.
Sweet corn: DO NOT graze or cut for stock food for 7 days after application.*

2.4 Results from residues trials presented to the APVMA

Animal Feed Commodities

Bean and pea vines, and sweet corn forage and fodder are significant animal feeds for beef and dairy cattle, and may contain residues of chlorantraniliprole as a result of the proposed use pattern in legume vegetables and sweet corn.

In trials conducted in sweet corn in Australia and Europe, residues of chlorantraniliprole in sweet corn forage on a dry weight basis at the proposed 7-day grazing withholding period were 0.44, 0.50, 0.60, 0.69, 0.71, 0.73, 0.75, 1.1 (2), 1.2, 1.4 (3), 1.5, 1.9 (2), 2.1, 2.5, 2.7, 3.3 (2), 3.5, 3.8, and 4.3 mg/kg (STMR = 1.4 mg/kg).

Residues of chlorantraniliprole in pea and bean forage from Australian residue trials, and in bean forage from European trials collected at the target grazing withholding period of 1 day after the last application were 0.83, 2.1, 2.2, 2.24, 2.6, 2.66, 3.1, 3.3, 3.5, 3.8, 3.9, 5.09, 5.55, and 5.6 mg/kg on a dry weight basis (STMR = 3.2 mg/kg).

Animal Commodities

Beef cattle in Australia can be fed up to 60% of their diet as legume forage, while dairy cattle can consume up to 70%. Sweet corn forage can be fed at up to 80% and 40% of the diet for beef and dairy cattle respectively.

The predicted residues in animal commodities derived from livestock fed on treated sweet corn or legume forage (using the calculated worst case HR values of 3.92 mg/kg and 3.44 mg/kg for dairy and beef cattle dietary burden respectively) are summarised below.

Table 3: Calculated residues and half-lives of chlorantraniliprole in key animal commodities

Matrix	Calculated HR (mg/kg)	Residue half-life (days)
Liver	0.011	1.8
Mammalian meat (in the fat)	0.010	1.6
Milk fat	0.051	1.5

2.5 Codex alimentarius commission and overseas MRLs

The Codex Alimentarius Commission (Codex) is responsible for establishing Codex Maximum Residue Limits (CXLs) for pesticides. Codex CXLs are primarily intended to facilitate international trade, and accommodate differences in Good Agricultural Practice (GAP) employed by various countries. Some

countries may accept Codex CXLs when importing foods. Chlorantraniliprole has been considered by Codex.

The following overseas MRLs / tolerances have been established for chlorantraniliprole in animal commodities.

Table 4: Overseas residue MRLs/tolerances for chlorantraniliprole in animal commodities

	Codex	Australia	US	Canada	EU	Japan
Liver	0.2	0.02	0.3	0.01	0.15	0.01
Meat (in the fat)	0.2	0.02	0.3	0.01	0.2	0.01
Whole milk	0.05	0.01	0.05	0.01	0.04	0.01
Milk fats	0.2	0.1	-	-	-	-
Residues definition	Parent	Parent (liver and meat) Parent + IN-K9T00 + IN-HXH44 (milk)	Parent	Parent	Parent	Parent

Relevant standards are not known to be established for chlorantraniliprole in Russia, China or Taiwan.

2.6 Current and proposed Australian MRLs for chlorantraniliprole

Current relevant MRLs and the residue definition for chlorantraniliprole are presented below. A full listing of MRLs can be found at <http://www.apvma.gov.au/residues/standard.php>.

Table 5: Current relevant entries in the MRL Standard - Table 1, Table 3 and Table 4

MRL STANDARD: TABLE 1

COMPOUND	FOOD	MRL (mg/kg)
CHLORANTRANILIPROLE		
MO 0105	Edible offal (mammalian)	*0.01
MM 0095	Meat (mammalian) [in the fat]	*0.01
ML 0106	Milks	*0.01

MRL Standard: TABLE 3

COMPOUND	RESIDUE
Chlorantraniliprole	<p><i>Commodities of plant origin and commodities of animal origin other than milk:</i> chlorantraniliprole</p> <p><i>Milk:</i> sum of chlorantraniliprole, 3-bromo-<i>N</i>-[4-chloro-2-(hydroxymethyl)-6-[(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1<i>H</i>-pyrazole-5-carboxamide, and 3-bromo-<i>N</i>-[4-chloro-2-(hydroxymethyl)-6-[[[(hydroxymethyl)amino]carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1<i>H</i>-pyrazole-5-carboxamide, expressed as chlorantraniliprole</p>

The following changes are proposed to Australian chlorantraniliprole MRLs:

Table 6: Proposed changes to the MRL Standard - Table 1 and Table 4

MRL STANDARD: TABLE 1

COMPOUND	FOOD	MRL (mg/kg)
CHLORANTRANILIPROLE		
DELETE:		
MO 0105	Edible offal, mammalian	*0.01
VO 0045	Fruiting vegetables, other than Cucurbits [except Peppers, Chilli]	0.3
MM 0095	Meat (mammalian) [in the fat]	*0.01
ADD:		
MO 0105	Edible offal, mammalian [except liver]	*0.01
VO 0045	Fruiting vegetables, other than Cucurbits [except Peppers, Chilli and Sweet corn (corn-on-the-cob)]	0.3
VP 0060	Legume vegetables	1
MM 0099	Liver of cattle, goats, sheep and pigs	0.02
MM 0095	Meat (mammalian) [in the fat]	0.02
FM 0183	Milk fats	0.1 ²
VO 0447	Sweet corn (corn-on-the-cob)	*0.01

² On 11 May 2012, this Trade Advice Notice was reissued to correct an error for a proposed maximum residue level (MRL) in FM 0183 milk fats from 0.03 to 0.1 mg/kg.

MRL STANDARD: TABLE 4

COMPOUND	ANIMAL FEED COMMODITY	MRL (mg/kg)
CHLORANTRANILIPROLE		
ADD:		
AL 0157	Legume animal feeds	10
	Sweet corn forage and fodder	7

2.7 Potential risk to trade

Export of treated produce containing finite (measurable) residues may pose a risk to Australian trade in situations where (i) no residue tolerance (import tolerance) is established in the importing country or (ii) where residues in Australian produce are likely to exceed a residue tolerance (import tolerance) established in the importing country.

Expected highest residues of chlorantraniliprole in meat (in the fat), liver and milk fat may be slightly above the relevant standards in some export markets.

Given:

- The conservative nature of the calculations of the expected meat and milk residues with the HR values of 4.3 and 5.6 mg/kg for sweet corn and legume forage respectively, noting the STMRs of 1.4 and 3.2 mg/kg;
- The short half-life of chlorantraniliprole residues in animal tissues and milk (≤ 2 days); and
- The bulking and blending that takes place in milk processing

The risk to Australian exports is expected to be low. However, APVMA welcomes any comments on the perceived trade risk and possible mitigation measures.

3 CONCLUSIONS

It is proposed to establish new MRLs for chlorantraniliprole in animal commodities. Comment is sought on the potential for chlorantraniliprole in Du Pont Coragen Insecticide to prejudice Australian trade when it is used on legume vegetables and sweet corn for the control of cotton bollworm and native budworm.

A more detailed technical assessment report on the evaluation of the trade implications of this chemical can be obtained by contacting the APVMA at (02) 6210 4748. Alternatively, the reports can be viewed at the APVMA Library, which is located at:

18 Wormald Street,
Symonston ACT, 2609

Office hours: 9.00 - 5.00 (EST) Monday to Friday