

## Evaluation Report for Category B, Subcategory 2.6 Application

**Application Number:** 2016-7442  
**Application:** New end use product; new combination of TGAIs  
**Product:** Minecto Pro Insecticide/Miticide  
**Registration Number:** 33023  
**Active ingredients (a.i.):** Abamectin and cyantraniliprole  
**PMRA Document Number :** 2845861

### Purpose of Application

The purpose of this application was to register a new commercial class product containing a combination of active ingredients (abamectin and cyantraniliprole) for use as an insecticide/miticide on terrestrial food and feed crops.

### Chemistry Assessment

Minecto Pro Insecticide/Miticide is formulated as suspension containing cyantraniliprole and abamectin at a nominal concentrations of at 135 g/L (limits: 128-142 g/L) and 28.5 g/L (limits: 27.1-29.9 g/L), respectively. This end used product has a density of 1.06 g/cm<sup>3</sup> and pH of 5.9. The chemistry requirements for this product have been fulfilled.

### Health Assessments

Minecto Pro Insecticide/Miticide is of high acute toxicity in rats via the oral route of exposure, is of low acute toxicity in rats via the dermal route, and is slightly acutely toxic in rats via the inhalation route. It is not irritating to the eyes or skin of rabbits and is not considered a dermal sensitizer, based on the results of a local lymph node assay in mice.

Minecto Pro Insecticide/Miticide is not expected to result in potential occupational or bystander exposures greater than those from the registered uses of abamectin and cyantraniliprole. 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 abamectin and cyantraniliprole were submitted to support the registration of Minecto Pro Insecticide/Miticide. Previously reviewed residue data from field trials conducted in/on potatoes, celeriac, fruiting vegetables, cucurbits, apples and pears were reassessed in the framework of this petition. Previously reviewed residue data from field trials conducted on head lettuce, leaf lettuce, and spinach were reassessed to extend MRLs from crop group 4 to crop subgroup 4-13A, and celery from crop group 4 to crop subgroup 22B for abamectin and cyantraniliprole. Previously reviewed residue data from field trials conducted on tomatoes and peppers (bell and non-bell) were reassessed to extend the MRL from crop group 8 to crop group 8-09 for abamectin.

### Maximum Residue Limits

The recommendation for maximum residue limits (MRLs) for abamectin and cyantraniliprole was based upon the previously reviewed field trial data, and the guidance provided in the [OECD MRL Calculator](#). Tables 1a and 1b summarize the residue data used to extend the proposed MRLs for leafy greens (crop subgroup 4-13A, and leaf petioles vegetables (crop subgroup 22B) for both abamectin and cyantraniliprole; and the residue data used to extend the proposed MRL for fruiting vegetables (crop group 8-09).

Commodity	Application Method/ Total Application Rate (g ai/ha)	PHI (days)	Residues (ppm)		Experimental Processing Factor	Currently Established MRL (ppm)	Recommended MRL (ppm)
			LAFT	HAFT			
Head lettuce	Foliar/62-65	5-7	<0.00 4	<0.010	None	0.1	0.1 <sup>1</sup>
Leaf lettuce	Foliar/62-65	6-7	<0.00 7	<0.034	None	0.1	0.1 <sup>1</sup>
Spinach	Foliar/64-66	7	<0.00 4	0.052	None	0.1	0.1 <sup>1</sup>
Celery	Foliar/64-66	7	<0.00 6	<0.018	None	0.1	0.1 <sup>2</sup>
Tomatoes (standard size and cherry tomatoes)	Foliar/ 62-65	7	<0.00 6	<0.008	1.0 (paste) 0.63 (puree)	0.02	0.02 <sup>3</sup>
Bell peppers	Foliar/ 63-66	7	<0.00 6	<0.012	None	0.02	0.02 <sup>3</sup>
Nonbell peppers	Foliar/ 62-64	7	<0.00 6	<0.010	None	0.02	0.02 <sup>3</sup>

<sup>1</sup>The MRL of 0.1 ppm is being extended to all crop in subgroup 4-13A.

<sup>2</sup>The MRL of 0.1 ppm is being extended to all crop in subgroup 22B.

<sup>3</sup>The MRL of 0.02 ppm is being extended to all crop in crop group 8-09.

Commodity	Application Method/ Total Application Rate (g ai/ha)	PHI (days)	Residues (ppm)		Experimental Processing Factor	Currently Established MRL (ppm)	Recommended MRL (ppm)
			LAF T	HAF T			
Head lettuce	Foliar/440-464	1	0.015	2.900	None	20	20 <sup>1</sup>
Leaf lettuce	Foliar/440-464	1	2.300	7.700	None	20	20 <sup>1</sup>
Spinach	Foliar/440-464	1	3.600	13.00 0	None	20	20 <sup>1</sup>

<b>TABLE 1b. Summary of Field Trial and Processing Data Used to Support Maximum Residue Limits (MRLs) for Cyantraniliprole.</b>							
<b>Commodity</b>	<b>Application Method/ Total Application</b>	<b>PHI (days)</b>	<b>Residues (ppm)</b>		<b>Experimental Processing</b>	<b>Currently Established</b>	<b>Recommended MRL</b>
Celery	Foliar/440-464	1	0.240	9.500	None	20	20 <sup>2</sup>

<sup>1</sup>The MRL of 20 ppm is being extended to all crop subgroup 4-13A.

<sup>2</sup>The MRL of 20 ppm is being extended to all crop subgroup 22B.

Following the review, MRLs as proposed in Tables 1a and 1b are recommended to cover residues of abamectin and cyantraniliprole. Residues in these crops at the proposed MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

### **Environmental Assessment**

To mitigate the potential impact of spray drift on habitats adjacent to treated fields, spray buffer zones are required for the application of Minecto Pro Insecticide/Miticide.

### **Value Assessment**

Value information in the form of rationales was provided to support Minecto Pro Insecticide/Miticide containing cyantraniliprole and abamectin. The rationales discussed extrapolation from registered products containing abamectin and cyantraniliprole. This information was sufficient to support Minecto Pro Insecticide/Miticide for use on celeriac, potato, tuberous and corm vegetables (crop subgroup 1C), leafy green vegetables (crop subgroup 4-13A), fruiting vegetables (crop group 8-09), cucurbit vegetables (crop group 9), apples, pears, and leaf petioles (crop subgroup 22B) to control or suppress a variety of mites and insects.

### **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 Minecto Pro Insecticide/Miticide.

### **References**

#### **PMRA**

#### **Document**

<b>Number</b>	<b>Reference</b>
2695740	2015, A21390F - OECD Document H (Confidential), DACO: 3.2.1 CBI
2695741	2015, A21390F - Analytical Method_Validation [CBI Removed], DACO: 3.4.1 CBI
2695742	2015, A21390F - Document MIII Section 2, DACO: 3.4.1 CBI
2695743	2015, A21390F - Document MIII Section 2, DACO: 3.4.1 CBI
2695744	2015, A21390F - Physico-Chemical Studies of Formulation, DACO: 3.5.1 CBI
2800044	2017, Syngenta CBI Clarification Response, DACO: 3.3 CBI
2695746	2015, A21390F - Acute Oral Tox - Rats, DACO: 4.6.1
2695747	2015, A21390F - Acute Dermal Tox - Rats, DACO: 4.6.2

2695748 2015, A21390F - Acute Inhalation Tox - Rats, DACO: 4.6.3  
2695749 2015, A21390F - Primary Eye Irritation - Rabbits, DACO: 4.6.4  
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2695751 2015, A21390F - Local Lymph Node Assay - Mice, DACO: 4.6.6  
2572743 2014, Agricultural Handler Exposure Scenario Monograph: Open Cab Airblast  
Application of Liquid Sprays, DACO: 5.3,5.4  
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