

# **Evaluation Report for Category B, Subcategory 4.1 Application**

**Application Number:** 2008-0645

**Application:** Conversion to full registration without consultation.

**Product:** Cruiser 5FS Seed Treatment

**Registration Number:** 27045

Active ingredients (a.i.): Thiamethoxam PMRA Document Number: 1877657

# **Background**

Cruiser 5FS Seed Treatment (Registration Number 27045) was first granted temporary registration in 2002 under the name of Adage 5FS as part of a Workshare review with the USA Environmental Protection Agency. The product name was subsequently changed in 2003 to that of Cruiser 5FS Seed Treatment. Cruiser 5FS Seed Treatment contains the technical grade active ingredient Thiamethoxam Technical Insecticide (Registration Number 26665) which was granted temporary registration in 2000. Cruiser 5FS Seed Treatment and Thiamethoxam Technical Insecticide were converted from temporary to conditional registration in accordance with Subsection 73(4) of the *Pest Control Products Regulations* in order to fulfill the requirements of the new *Pest Control Products Act (PCPA)* in 2007.

At the time of initial registration of Cruiser 5FS Seed Treatment in 2002, conditions of registration included requirements for efficacy and occupational data as well as the registration status of Thiamethoxam Technical Insecticide. At the time of the current application, the remaining conditions of registration are the status of the conditionally registered Thiamethoxam Technical Insecticide and the outstanding efficacy and occupational data.

# **Purpose of Application**

The purpose of this application is to request the conversion of Cruiser 5FS Seed Treatment, containing the technical Thiamethoxam Technical Insecticide, from conditional to full registration. A similar application has been made for Thiamethoxam Technical Insecticide (submission number 2008-0617).

## **Chemistry Assessment**

No chemistry assessment was required for this application.



#### **Health Assessment**

No data was submitted to address the outstanding occupation data requirements that were triggered by application number 2007-3163. These data deficiencies remain outstanding.

## **Environmental Assessment**

During the environmental review of the application for conversion of the technical thiamethoxam and its associated end-use products, new data were reviewed which confirmed that thiamethoxam and its transformation product clothianidin are persistent in the environment. Clothianidin, an insecticide in its own right, is also expected to leach to groundwater. At the proposed application rate and use pattern, there are concerns with the use of Cruiser 5FS in regards to toxicity to bees and other non-target arthropods for both thiamethoxam and clothianidin. Due to these concerns, a new study has been requested to establish potential exposure to bees and non-target arthropods.

## Value Assessment

In a related submission, tank mixes of Cruiser 5FS Seed Treatment with Maxim XL Seed Treatment Fungicide (Registration Number 27071) or with Maxim 480FS Fungicide (Registration Number 27001) and Apron XL LS Fungicide (Registration Number 25585) were proposed. Additional data was requested to support the proposed tank mixes. On November 27, 2009, PMRA published a memo stating that data will no longer be required to support tank mixing pesticide products as long as the proposed products are used according to the registered use pattern for each tank-mix partner. In this case, the products are seed treatments proposed for use at the registered rates. Since the proposed use falls within the registered use pattern for all of the tank-mix partners, the tank mixes of Cruiser 5FS Seed Treatment with Maxim XL Seed Treatment Fungicide or with Maxim 480FS Fungicide and Apron XL LS Fungicide are supported as proposed. No further data is required.

#### Conclusion

The PMRA has completed an assessment of available information for Cruiser 5FS Seed Treatment. Based on the requirement for additional environmental data requested for the seed treatment products and the outstanding occupational data, Cruiser 5FS Seed Treatment is to continue with a conditional registration.

### References

# List of Studies/Information Submitted by Registrant

PMRA Document	Reference
Number	
1610615	2008, Thiamethoxam 25 WG Formulation (A9584C): Herbicide Profiling Test to Evaluate the Phytotoxicity to Terrestrial (non-target) Higher Plants, A51197, DACO: 9.8.4
1529809	1998, Assessment of the Side Effects of ACTARA 25WG on the Honey Bee (Apis mellifera L.) After Application on Broad Beans, 982553, DACO: 9.2.4.3,9.2.9
1529851	2007, CGA-355190 - Acute Toxicity to Chironomus riparius Under Static Conditions, T007450-06, DACO: 9.3.4
1529852	2003, Effects of CGA 353042 (Metabolite of CGA 293343) on the Development of Sediment Dwelling Larvae of Chironomus riparius in a Water-Sediment System, 848311, DACO: 9.3.4
1529853	2007, NOA404617 - Acute Toxicity to Chironomus riparius Under Static Conditions, T007454-06, DACO: 9.3.4
1529854	2000, Toxicity Test of NOA-407475 (Metabolite of CGA 293343) on Sediment Dwelling Chironomus riparius (syn. Chironomus thummi) Under Static Conditions, 982580, DACO: 9.3.4
1610615	2008, Thiamethoxam 25 WG Formulation (A9584C): Herbicide Profiling Test to Evaluate the Phytotoxicity to Terrestrial (non-target) Higher Plants, A51197, DACO: 9.8.4

# **Additional Information Considered**

## i) Published Information

U.S. EPA, 2003. EFED Risk Assessment for the Seed Treatment of Clothianidin 600FS on Corn and Canola. United States Environmental Protection Agency. DP Barcode 278110. <a href="http://epa.gov/pesticides/foia/reviews/044309/index.htm">http://epa.gov/pesticides/foia/reviews/044309/index.htm</a>

U.S. EPA, 2004. EFED Registration Chapter for Clothianidin for use on Tobacco, Turf, Applies, Pears and Ornamentals. United States Environmental Protection Agency. DP Barcode 296177 and D287186. <a href="http://epa.gov/pesticides/foia/reviews/044309/index.htm">http://epa.gov/pesticides/foia/reviews/044309/index.htm</a>
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