

## Evaluation Report for Category B, Subcategory 4.1 Application

**Application Number:** 2008-0648  
**Application:** Conversion to full registration without consultation.  
**Product:** Helix Colourless Seed Treatment  
**Registration Number:** 27312  
**Active ingredients (a.i.):** Difenoconazole, Fludioxonil, Metalaxyl-M and Thiamethoxam  
**PMRA Document Number :** 1877688

### Background

Helix Colourless Seed Treatment (Registration Number 27312) was first granted temporary registration in 2003, while its precedent product Helix Liquid Seed Treatment (Registration Number 26637) was granted temporary registration in 2000. Helix Colourless Seed Treatment contains the technical grade active ingredients difenoconazole, fludioxonil, metalaxyl-M and thiamethoxam. Helix Colourless Seed Treatment and Helix Liquid Seed Treatment were subsequently 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 Helix Colourless Seed Treatment in 2003, the condition of registration was the requirement for the registration status of the precedent product Helix Liquid Seed Treatment and the technical, thiamethoxam, to convert to full registration. Therefore, at the time of this application the only remaining conditions of registration were the status of the conditionally registered Helix Liquid Seed Treatment and Thiamethoxam Technical Insecticide.

### Purpose of Application

The purpose of this application is to request the conversion of Helix Colourless Seed Treatment, containing the technicals difenoconazole, fludioxonil, metalaxyl-M and thiamethoxam, from conditional to full registration. Similar applications have been made for Helix Liquid Seed Treatment (application number 2008-0649) and Thiamethoxam Technical Insecticide (application number 2008-0617).

### Chemistry, Health and Value Assessment

No chemistry, health or value assessments were required for this application.

## 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 Helix Colourless Seed Treatment 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.

## Conclusion

The review conclusion of the application for the conversion from conditional to full registration of Helix Liquid Seed Treatment (2008-0649) is to continue with a conditional registration.

The PMRA has completed an assessment of available information for Helix Colourless Seed Treatment. Based on the continuing conditional registration status of Helix Liquid Seed Treatment and the requirement for additional environmental data requested for the seed treatment products, Helix Colourless Seed Treatment is to continue with conditional registration.

## References

### List of Studies/Information Submitted by Registrant

PMRA Document Number	Reference
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 ( <i>Apis mellifera</i> L.) After Application on Broad Beans, 982553, DACO: 9.2.4.3,9.2.9
1529851	2007, CGA-355190 - Acute Toxicity to <i>Chironomus riparius</i> 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 <i>Chironomus riparius</i> in a Water-Sediment System, 848311, DACO: 9.3.4
1529853	2007, NOA404617 - Acute Toxicity to <i>Chironomus riparius</i> Under Static Conditions, T007454-06, DACO: 9.3.4
1529854	2000, Toxicity Test of NOA-407475 (Metabolite of CGA 293343) on Sediment Dwelling <i>Chironomus riparius</i> (syn. <i>Chironomus thummi</i> ) 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
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## **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.

<http://epa.gov/pesticides/foia/reviews/044309/index.htm>

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. <http://epa.gov/pesticides/foia/reviews/044309/index.htm>

ISSN: 1911-8082

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