



## Evaluation Report for Category B, Subcategory 4.1 Application

**Application Number:** 2011-4448  
**Application:** Conversion or Extensions to Ltd. or Term-Conversion to full registration without consultation  
**Product:** Maxim Quattro Seed Treatment  
**Registration Number:** 29871  
**Active ingredients (a.i.):** Thiabendazole [TZL]; fludioxonil [FLD]; metalaxyl-M and S-isomer [MFN]; azoxystrobin [AZY]  
**PMRA Document Number :** 2151143

### Background

Maxim Quattro Seed Treatment containing the active ingredients thiabendazole, fludioxonil, metalaxyl-M and S-isomer and azoxystrobin and is currently registered for use to control various seedling diseases in corn. Maxim Quattro Seed Treatment has a conditional registration since March 9, 2011. The conditions of registration were storage stability data, corrosion characteristics data and confirmatory dust off data.

### Purpose of Application

The purpose of this application was to fulfill the conditions of registration and convert Maxim Quattro Seed Treatment from conditional to full registration.

### Chemistry Assessment

Maxim Quattro Seed Treatment is a liquid containing the active ingredients thiabendazole at a nominal concentration of 26.5%, fludioxonil at a nominal concentration of 3.32%, metalaxyl-M and S-isomer at a nominal concentration of 2.65%, and azoxystrobin at a nominal concentration of 1.33%. This product has a density of 1.13 g/mL and pH of 6.69 for a 1% solution in water. The product contains the allergen sulfites. The chemistry requirements for Maxim Quattro Seed Treatment have been completed.

### Health Assessments

The conversion of Maxim Quattro Seed Treatment to full registration can be supported from an occupational exposure perspective. The applicant submitted the required dust off study that compared the dust off potential of corn seed treated with Maxim Quattro Seed Treatment to canola and soybean seed treated with products in the surrogate studies, which were used to evaluate exposure during seed treatment activities. No unacceptable risk is expected when workers follow label directions and wear personal protective equipment as recommended on the label.

## **Incident Reporting:**

Since April 26, 2007, registrants have been required by law to report incidents, including adverse effects to health and the environment, to the PMRA. Information on the reporting of incidents can be found on the PMRA website. Incidents were searched and reviewed for azoxystrobin, fludioxonil, metalaxyl-m and thiabendazole. As of September 25, 2012, a total of 26 human and 17 domestic animal incidents were reported to the PMRA involving these four active ingredients, either alone, in combination with each other, or in combination with other active ingredients. Of these, the symptoms reported in 21 human and 10 domestic animal incidents were considered to have at least some degree of association with exposure to pesticides.

All of the Canadian human incidents were minor or moderate in severity. Of the 21 human cases classified as possible or higher, skin symptoms were most frequently reported (e.g. pruritus, blisters), followed by gastrointestinal (e.g. diarrhea, vomiting), and general symptoms (e.g. headache, malaise).

Animals generally experienced symptoms after eating treated seed. Gastrointestinal symptoms were most frequently reported in domestic animal incidents, followed by general symptoms and nervous and muscular symptoms.

These incident reports were considered in this evaluation. A warning has been added to the label to warn the user to keep the product out of reach of pets.

## **Environmental & Value Assessment**

Environmental & value assessments were not required for this application.

## **Conclusion**

The PMRA has reviewed the available information and can support the conversion of Maxim Quattro Seed Treatment from conditional to full registration.

## **References**

<b>PMRA #</b>	<b>Reference</b>
2105581	2010, A14918D - Content of Active Ingredients and Corrosion Characteristics After Storage for 1 Year in Non-Fluorinated HDPE at 20C, DACO: 3.5.10,3.5.14
2105582	2010, Laboratory Dust-Off Measurements of Corn Seed Treated with Maxim Quattro Seed Treatment, DACO: 5.14

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