

Evaluation Report for Category B, Subcategory 2.1, 2.3, 2.4, 2.6 Application

Application Number: 2012-2246
Application: B.2.1 (Product chemistry – guarantee)
B.2.3 (Product chemistry – identity of formulants)
B.2.4 (Product chemistry – proportion of formulants)
B.2.6 (Product chemistry – new combination of TGAIs)
Product: Cruiser Maxx Potato Extreme
Registration Number: 31024
Active ingredients (a.i.): Thiamethoxam (THE), Fludioxonil (FLD), Difenoconazole (DFZ)
PMRA Document Number : 2219879

Purpose of Application

The purpose of this application was to register Cruiser Maxx Potato Extreme, a new potato seed piece treatment product. Cruiser Maxx Potato Extreme is a premix formulation that contains the active ingredients thiamethoxam, fludioxonil and difenoconazole. It is proposed for the control of black scurf/stem and stolon canker (*Rhizoctonia solani*), silver scurf (*Helminthosporium solani*), fusarium dry rot (*Fusarium* spp.) and insect pests on potato.

Chemistry Assessment

Cruiser Maxx Potato Extreme is formulated as a suspension containing thiamethoxam at a nominal concentration of 250 g/L, fludioxonil at a nominal concentration of 62.5 g/L and difenoconazole at a nominal concentration of 123 g/L. This end-use product has a density of 1.19 g/mL and pH of 6.7. The chemistry requirements for Cruiser Maxx Potato Extreme are complete.

Health Assessments

Based on the submitted acute studies, Cruiser Maxx Potato Extreme is of low acute toxicity via the oral, dermal and inhalation routes, is minimally irritating to the eyes and skin and is not considered to be a skin sensitizer.

The use of Cruiser Maxx Potato Extreme for use on potato seed pieces fits within the registered use pattern for fludioxonil, difenoconazole and thiamethoxam. The potential exposure for chemical handlers, treaters and planters is not expected to exceed the current exposure to registered products. However, for difenoconazole on potato pieces, conditional registration was granted pending submission of further occupational exposure data to estimate exposure to workers planting potato seed pieces.

Residue data for thiamethoxam, fludioxonil or difenoconazole in/on potatoes were not submitted to support the registration of Cruiser Maxx Potato Extreme end-use product containing those actives for use as a potato seed piece treatment. Previously reviewed residue data from field

trials conducted in/on potatoes were reassessed in the framework of this application. All three actives are currently registered as potato seed piece treatment at the same or higher rate as that proposed on the Cruiser Maxx Potato Extreme label, therefore, the current submission does not constitute an expansion of use. Residues of thiamethoxam, fludioxonil and difenoconazole in/on potato commodities at the established MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

No environmental concerns were identified as the proposed application rate of Cruiser Maxx Potato Extreme (thiamethoxam, fludioxonil and difenoconazole) for use as a potato seed treatment falls within that of currently registered potato seed treatment products containing thiamethoxam, fludioxonil and difenoconazole alone or in combination.

Value Assessment

The seed treatment Cruiser Maxx Potato Extreme combines the potato pest claims registered on Actara 240SC Insecticide (240 g thiamethoxam/L) and Maxim D (19.4 g fludioxonil/L, 19.4 g difenoconazole/L) for broad-spectrum pest control in a single pre-mix application.

The application rate for difenoconazole as a potato seed piece treatment in Cruiser Maxx Potato Extreme falls within the registered rates on the Maxim D label, for control of stem and stolon canker, fusarium dry rot and silver scurf. Use history from the U.S. product Cruiser Maxx Potato (28% thiamethoxam, 7% fludioxonil) confirmed the suppressive effect of fludioxonil against black scurf at the lower rate of 1.25 g a.i./100 kg seed.

The application rate for thiamethoxam as a potato seed piece treatment in Cruiser Maxx Potato Extreme falls within the registered rates on Actara 240 SC Insecticide and Cruiser Potato Seed Treatment labels, for control of Colorado potato beetle, aphids and potato leafhopper on potatoes. Co-formulation with the fungicide active ingredients fludioxonil and difenoconazole is not expected to reduce the efficacy of thiamethoxam.

Therefore, potato pest claims from the Actara 240SC Insecticide and Maxim D labels can be extrapolated to Cruiser Maxx Potato Extreme, as proposed. Cruiser Maxx Potato Extreme at 20 mL/100 kg seed is supported to control stem and stolon canker, fusarium dry rot, silver scurf, Colorado potato beetle, aphids and potato leafhopper as well as to suppress black scurf on potatoes.

Conclusion

The PMRA has completed an assessment of the available information and is able to support conditional registration of Cruiser Maxx Potato Extreme, to control a number of diseases and insect pests on potato.

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