Health Canada Santé Canada

Evaluation Report for Category B, Subcategory 3.4 Application

Application Number:	2011-2264
Application:	New/Changes to Product Labels-Application Method
Product:	Titan Insecticide
Registration Number:	27449
Active ingredients (a.i.):	Clothianidin [COD]
PMRA Document Number:	2199184

Background

Titan ST Insecticide (Registration No. 27449) was first registered in 2003 and currently has a conditional registration for use as a seed treatment for control of insects and suppression of wireworms in potatoes.

Purpose of Application

The purpose of this application was to add in-furrow application method for control of Colorado potato beetle and leafhopper in potatoes to the label of Titan ST Insecticide (Registration No. 27449). The applicant also requested a name change to Titan Insecticide.

Chemistry Assessment

A chemistry assessment was not required for this application.

Health Assessments

A toxicology assessment was not required for this application as there were no changes to the toxicological profile.

A health risk assessment of chemical handlers for in-furrow applications of clothianidin identified no unacceptable risk for mixer/loaders and applicators handling Titan Herbicide. Exposure to re-entry workers and bystanders was not assessed since clothianidin application is soil directed at the time of planting. No unacceptable risk is expected when workers follow the label directions and wear the personal protective equipment presented on the label.

Canada

No new residue data were submitted to support the addition of in-furrow applications for the control of Colorado potato beetles and leafhoppers in/on potatoes. Based on previously submitted and reviewed data on file, amending the Titan Insecticide label to include an in-furrow application method will not have any impact on the magnitude of clothianidin residues. Residues of clothianidin in/on potatoes and its processed commodities following in-furrow treatment will be covered by the proposed MRLs (PMRL2010-54). Therefore, the dietary exposure is not expected to increase and should not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

The environmental fate, behaviour and toxicity of clothianidin are presented in the Regulatory Note REG2004-06, *Clothianidin Poncho 600 Seed Treatment Insecticide* and the Evaluation Report ERC2011-01, *Clutch 50 WDG, Arena 50 WDG and Clothianidin Insecticides*.

The environmental risk associated with the in-furrow application method is not expected to exceed the risk associated with registered uses. The appropriate environmental mitigating measures are already present on the label; therefore, no additional mitigation measures were required for the addition of in-furrow applications.

Value Assessment

To support the addition of in-furrow applications to the Titan Insecticide label at rates of 2.0 to 3.33 ml Titan Insecticide per metre row for control of Colorado potato beetles (CPB) and leafhoppers in potatoes, a total of 11 trials were reviewed. Included in these trials were studies using Titan Insecticide and other formulations of clothianidin, which demonstrated that Titan Insecticide will control CPB and leafhoppers. While only one study tested a range of clothianidin application rates (other studies only tested one rate per study), this study demonstrated a rate effect. As a rate effect was observed in the single multiple-rate study, and as a wide range of application rates (1.2 to 2.88 g a.i. per 100 m row) were tested in the various submitted trials, a rate range of 2.0 to 3.33 ml Titan Insecticide per metre row of potato for control of CPB and leafhoppers was supported from an efficacy and value perspective, and no further efficacy data were required.

Conclusion

An evaluation of the available information supports the name change of Titan ST Insecticide to Titan Insecticide and to amend the label to include in-furrow application method for control of Colorado potato beetle and leafhopper in potatoes. This product continues to have a Conditional Registration.

References

PMRA No.	Reference
2058735	2011, Titan Insecticide - Data to support insect control in potato with in-furrow and foliar applications, DACO: 10.1,10.2,10.2.1,10.2.2,10.2.3,10.2.3.1, 10.2.3.3(C),10.3,10.3.1,10.3.2
2058737	2011, Petition to Establish In-furrow and Foliar Uses With Clothianidin on Potatoes, DACO: 7.4.1,7.8
1565990	2003, EPA DER for Dermal Penetration Study in Monkey 2003, DACO: 5.8

ISSN: 1911-8082