

Evaluation Report for Category B, Subcategory B.2.6 Application

Application Number: 2005-3853
Application: Category B, Subcategory B.2.6 (New EP)
Product: CRUISER MAXX BEANS SEED TREATMENT
Registration Number: 28821
Active ingredients (a.i.): Thiamethoxam (THE) Insecticide, Fludioxonil (FLD) and Metalaxyl-M (MFN) Fungicides
PMRA Document Number: 1516728

Background

CRUISER MAXX BEANS SEED TREATMENT is a seed treatment insecticide and fungicide for use on soybeans and dry beans. CRUISER MAXX BEANS SEED TREATMENT controls wireworms and other chewing and sucking insects through contact and systemic activity of thiamethoxam, a compound belonging to a neonicotinoid. Fludioxonil and metalaxyl-M fungicides present in CRUISER MAXX BEANS SEED TREATMENT control certain seed and soil-borne diseases of soybeans and dry beans. Cruiser 350 FS Seed Treatment (Reg. No. 27986), containing thiamethoxam, is registered for control of wireworm, seed corn maggot, European chafer and potato leafhoppers on soybeans and dry beans. Apron MAXX RTA Fungicide (Reg. No. 27577), containing fludioxonil and metalaxyl-M, is registered to control several diseases on soybeans and dry beans.

Purpose of Application

The purpose of this submission was to register a new pre-mixed seed treatment product based on registered active ingredients and the seed treatment end-use products, Cruiser 350 FS Seed Treatment and Apron MAXX RTA Fungicide.

Value Assessment

Since the insecticide active ingredient, application rate and the target pest/crop combinations for CRUISER MAXX BEANS SEED TREATMENT are similar to a registered product, their efficacy is expected to be similar. Likewise, a slight increase of the fungicide guarantee of CRUISER MAXX BEANS SEED TREATMENT compared to the registered product is not expected to impact on product efficacy. Therefore, the use of CRUISER MAXX BEANS SEED TREATMENT to control insect pests (wireworm, seed corn maggot, European chafer and potato leafhopper) and specific seed and seedling diseases caused by *Pythium spp.*, *Rhizoctonia spp.*, *Fusarium spp.*, *Phomopsis spp.*, *Phytophthora megasperma* var. *sojae* and *Colletotrichum spp.* of soybeans and dry beans at the rate of 195 ml product per 100 kg seed is acceptable.

Chemistry, Health and Environmental Assessment

Chemistry Assessment

CRUISER MAXX BEANS SEED TREATMENT is formulated as a suspension concentrate containing fludioxonil at a nominal concentration of 1.12%, metalaxyl-M (*R*- and *S*-isomers) at a nominal concentration of 1.70%, and thiamethoxam at a nominal concentration of 22.6%. This end-use product has a density of 1.154 g/cm³ and pH of 6-7 for a 1% dispersion. The chemistry requirements for CRUISER MAXX BEANS SEED TREATMENT are complete.

Health Assessment

The requested use of CRUISER MAXX BEANS SEED TREATMENT, fits within the existing use patterns for thiamethoxam, fludioxonil and metalaxyl-M. A significant increase in exposure for individuals treating seed, bagging, sewing, stacking and cleaning seed treatment equipment is not expected. Similarly, exposure is not expected to change for individuals planting treated seeds.

CRUISER MAXX BEANS SEED TREATMENT is of low toxicity to rats via the oral, dermal, and inhalation routes. It is minimally irritating to the eye and slightly irritating to the skin of rabbits. CRUISER MAXX BEANS SEED TREATMENT is not a dermal sensitizer in guinea pigs.

A food residue assessment was not required.

Environmental Assessment

No environmental studies were required to support registration of CRUISER MAXX BEANS SEED TREATMENT, as it has the same use pattern and application rates as Cruiser 350 FS Seed Treatment and Apron MAXX RTA Fungicide. Therefore, no additional impact to the environment is expected from use of CRUISER MAXX BEANS SEED TREATMENT.

Conclusion

The PMRA has completed an evaluation of the subject application and has found the information sufficient to register CRUISER MAXX BEANS SEED TREATMENT to be used as a seed treatment insecticide and fungicide for control of insect pests (wireworm, seed corn maggot, European chafer and potato leafhopper) and specific seed and seedling diseases caused by *Pythium spp.*, *Rhizoctonia spp.*, *Fusarium spp.*, *Phomopsis spp.*, *Phytophthora megasperma* var. *sojae* and *Colletotrichum spp.* of soybeans and dry beans.

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