

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

Application Number: 2015-0967

Application: B.2.1 New EP Product Chemistry - Guarantee

B.2.3 New EP Product Chemistry - Identity of FormulantsB.2.4 EP Product Chemistry - Proportion of Formulants

B.2.6 New EP Product Chemistry - New combination of TGAIs

Product: Cruiser Maxx Vibrance Pulses

Registration Number: 34527

Active ingredients (a.i.): thiamethoxam, metalaxyl-M and S-isomer, fludioxonil,

thiabendazole, sedaxane

PMRA Document Number: 2626838

Purpose of Application

The purpose of this application was to register a new end-use product, Cruiser Maxx Vibrance Pulses, for seed treatment on dry peas, chickpeas, lentils, lupins and dry fava beans. Cruiser Maxx Vibrance Pulses is a coformulation of one insecticide (thiamethoxam) and four fungicides (thiabendazole, sedaxane, metalaxyl-M and S-isomer, and fludioxonil). Each active is already registered in Canada as seed treatments for the crops listed on Cruiser Maxx Vibrance Pulses at the time of its registration.

Chemistry Assessment

Cruiser Maxx Vibrance Pulses is formulated as a suspension concentrate containing thiamethoxam at 92.4 g/L, metalaxyl-M and S-isomer at 11.6 g/L, fludioxonil at 7.7 g/L, thiabendazole at 46.2 g/L and sedaxane at 15.4 g/L. This end-use product has a density of 1.09 g/cm³ and pH of 5-8. The required chemistry data for Cruiser Maxx Vibrance Pulses have been provided, reviewed and found to be acceptable.

Health Assessments

Cruiser Maxx Vibrance Pulses is of low acute toxicity to rats via the oral, dermal and inhalation routes. It is practically non-irritating to the eye and minimally irritating to the skin of rabbits. Cruiser Maxx Vibrance Pulses is not considered to be a dermal sensitizer.

An updated risk assessment was performed for commercial cleaners that may be exposed to Cruiser Maxx Vibrance Pulses and no health risk of concern is expected when workers follow the label directions and wear the personal protective equipment identified on the label.

No new residue data were submitted to support the registration of Cruiser Maxx Vibrance Pulses. Thiabendazole, metalaxyl-M and S-isomer, sedaxane, fludioxonil and thiamethoxam are currently registered in Canada as seed treatments on these crops, and the application rates and use



restrictions for the Cruiser Maxx Vibrance Pulses are equivalent to or more conservative than the registered rates and restrictions of the precedent products.

The maximum residue limits (MRLs) currently established for residues of these actives are considered adequate to cover the expected residue levels generated by the use of Cruiser Maxx Vibrance Pulses. Dietary exposure to these active ingredients is not expected to increase and will not pose an unacceptable health risk to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

As the application rates are the same as the current registered application rates for these actives, no additional environmental risk is expected from the use of this product. Environmental concerns are mitigated with environmental label statements, and the environmental label statements were updated to reflect the risk mitigation measures in the recent re-evaluation decisions RVD2019-04 (*Thiamethoxam and Its Associated End-use Products: Pollinator Re-evaluation*) and SRD2021-04 (*Special Review Decision: Thiamethoxam Risk to Aquatic Invertebrates*).

Value Assessment

No value information was submitted with the application. The registration of Cruiser Maxx Vibrance Pulses is based on precedent products. Since the activity of each of the fungicide and insecticide active ingredients have been shown to control the diseases and insect pests listed on the Cruiser Maxx Vibrance Pulses label, and the application rates are equivalent to the registered rates, the extrapolation of the claims from the precedent fungicide and insecticide seed treatments to the Cruiser Maxx Vibrance Pulses label was supported.

As a seed treatment, Cruiser Maxx Vibrance Pulses can be integrated into an IPM program. Multiple fungicides acting against certain fungal pests will help delay the development of resistance. The fungicide and insecticide active ingredients have been combined as tank mixes by growers previously, so the compatibility of the actives has been established. A pre-mixture of the desired active ingredients reduces the amount of time and labour involved with tank mixing.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided in support of the product, Cruiser Maxx Vibrance Pulses, and has found the information sufficient to register this end-use product.

References

2510605	2015, CRUISER MAXX VIBRANCE PULSES (A21174B): Identity, DACO:
	3.1.1,3.1.3,3.1.4
2510606	2015, Thiamethoxam/ Metalaxyl-M and S-isomer (Mefenoxam)/ Fludioxonil/
	Thiabendazole/ Sedaxane: A21174B - Document J - Product Chemistry Volume, DACO:
	3.1.2,3.2.1,3.2.2,3.2.3,3.3.1,3.4.2 CBI

2510607 2015, Thiamethoxam/ Metalaxyl-M and S-isomer (Mefenoxam)/ Fludioxonil/ Thiabendazole/ Sedaxane: A21174B - Document H, DACO: 3.2.1 CBI 2510608 2014, Thiamethoxam/ Metalaxyl-M and S-isomer (Mefenoxam)/ Fludioxonil/ Thiabendazole/ Sedaxane: A21174B - Analytical Method SF-736/1 - Determination of MK360, CGA173506, CGA293343, CGA329351, SYN524464 in A21174B by UHPLC, DACO: 3.4.1 2510609 2014, Thiabendazole/ Fludioxonil/ Thiamethoxam/ Metalaxyl-M/ Sedaxane: A21174B -Validation of Analytical Method SF-736/1, DACO: 3.4.1 2014, Thiamethoxam/ Metalaxyl-M and S-isomer (Mefenoxam)/ Fludioxonil/ 2510610 Thiabendazole/ Sedaxane: A21174B - Analytical Method SFA-736/1 - Determination of CGA329351 and CGA351290 in A21174B by HPLC, DACO: 3.4.1 2015, Thiabendazole/ Fludioxonil/ Thiamethoxam/ Metalaxyl-M/ Sedaxane: A21174B -2510611 Validation of Analytical Method SFA-736/1, DACO: 3.4.1 2510612 2015, CRUISER MAXX VIBRANCE PULSES (A21174B) - Physiochemical Studies Summary, DACO: 3.5.1,3.5.10,3.5.11,3.5.12,3.5.13,3.5.14,3.5.15,3.5.2,3.5.3,3.5.4,3.5.5,3.5.6,3.5.7,3.5.8, 3.5.9 2510613 2015, Thiamethoxam/ Metalaxyl-M and S-isomer (Mefenoxam)/ Fludioxonil/ Thiabendazole/ Sedaxane: A21174B - Physico-Chemical Studies of the Formulation, DACO: 3.5.1,3.5.10,3.5.11,3.5.12,3.5.13,3.5.14,3.5.15,3.5.2,3.5.3,3.5.5,3.5.6,3.5.7,3.5.8, 3.5.9 2016, CBI information- Response to clarification, DACO: 3.2.2 CBI 2635532 2510581 2015, CRUISER MAXX VIBRANCE PULSES (A21174B): Summary of Previously Submitted Data, DACO: 10.1

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