



## Evaluation Report for Category B, Subcategory 2.6 Application

**Application Number:** 2017-2866  
**Application:** New EP Product Chemistry-New combination of Technical Grade Active Ingredients  
**Product:** Balance Bean MTZ  
**Registration Number:** 33249  
**Active ingredients (a.i.):** Metribuzin and Isoxaflutole  
**PMRA Document Number:** 2916694

### Purpose of Application

The purpose of this application was to register a new premix herbicide formulation, Balance Bean MTZ, containing the active ingredients metribuzin and isoxaflutole, for use on isoxaflutole-tolerant soybeans. The tank mixture of Converge Pro (Reg. No. 27446; isoxaflutole) and Sencor 480 F (Reg. No. 26280; metribuzin) was cited as the precedent for the registration.

### Chemistry Assessment

Balance Bean MTZ is formulated as a suspension containing metribuzin at a concentration of 420 g/L and isoxaflutole at a concentration of 105 g/L. This end-use product has a density of 1.15 g/mL and pH of 4.8. The required chemistry data for Balance Bean MTZ have been provided, reviewed and found to be acceptable.

### Health Assessments

Balance Bean MTZ is of slight acute oral toxicity and low dermal and inhalation toxicity in rats. It is non-irritating to the eye and skin of the rabbit. It is not a dermal sensitizer.

Use of Balance Bean MTZ on isoxaflutole-tolerant soybeans is not expected to result in an increase in the potential occupational or bystander exposure over the previously registered uses of isoxaflutole and metribuzin. The occupational exposure and risk were assessed, and no risks of concern are expected when workers follow label directions and wear personal protective equipment as stated on the label.

No new residue data for isoxaflutole and metribuzin in isoxaflutole-tolerant soybeans were submitted. Previously reviewed residue data from field trials conducted in/on soybeans were reassessed in the framework of this petition. In addition, a processing study in treated soybeans was also reassessed determine the potential for concentration of residues of isoxaflutole and metribuzin into processed commodities.

The resulting residues on dry soybeans from the use of Balance Bean MTZ are expected to be covered under the MRLs currently established for the active ingredients in/on dry soybeans. Residues in dry soybeans at the established MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

### **Environmental Assessment**

As the maximum application rate of Balance Bean MTZ on isoxaflutole-tolerant soybeans does not exceed the previously registered application rates for both isoxaflutole and metribuzin, it is not anticipated that this use expansion will pose any additional risk to the environment. Statements on the label are sufficient to mitigate any environmental concerns when Balance Bean MTZ is used in accordance with label directions.

### **Value Assessment**

The registration of two active ingredients, isoxaflutole and metribuzin, from two herbicide mode of action groups in a single formulation provides farmers with an efficient tool for broad spectrum weed control and herbicide resistance management.

Value information submitted for review included data from small plot replicated field trials conducted in Ontario and Quebec in 2014. Product performance of Balance Bean MTZ, in terms of both efficacy and crop tolerance, was evaluated and compared to that of the cited precedent tank mixture applied at comparable rates in accordance with the label instructions. Trial information demonstrated that the performance of Balance Bean MTZ was acceptable, and comparable to that of the precedent tank mixture from a value perspective.

### **Conclusion**

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found it sufficient to support the registration of the new premix herbicide, Balance Bean MTZ.

## References

### PMRA

#### Document

Number	Reference
2770623	2017, Formulating Plant's Name And Address, DACO: 3.1.1,3.1.2,3.1.3,3.1.4 CBI
2770624	2017, Description Of Starting Materials, DACO: 12.7.3, 3.2.1, 3.3.1,3.5.13,3.5.15,3.5.5,Document J,Document M CBI
2770625	2015, Description Of The Formulation Process, DACO: 3.2.2 CBI
2770626	2014, Enforcement Analytical Method, DACO: 3.4.1 CBI
2770627	2014, Enforcement Analytical Method, DACO: 3.4.1 CBI
2770628	2015, Ph, DACO: 3.5,3.5.2,3.5.4,3.5.6,3.5.7,3.5.9 CBI
2770629	2017, Corrosion Characteristics, DACO: 3.5.10,3.5.14 CBI
2770630	2014, Explodability, DACO: 3.5.11,3.5.12,3.5.8 CBI
2820747	2017, Enforcement Analytical Method, DACO: 3.4.1 CBI
2750403	2015, Acute Oral Toxicity - Up-And-Down Procedure In Rats, DACO: 4.6.1
2750405	2015, IFT+MRB SC 525: Acute Dermal Toxicity in Rats, DACO: 4.6.2
2750408	2015, IFT+MRB SC 525: Acute Inhalation Toxicity In Rats, DACO: 4.6.3
2750409	2015, IFT+MRB SC 525: Primary Eye Irritation in Rabbits, DACO: 4.6.4
2750410	2015, IFT+MRB SC 525: Primary Skin Irritation in Rabbits, DACO: 4.6.5
2750411	2015, Local Lymph Node Assay (LLNA) in Mice, DACO: 4.6.6
1913109	2009, Agricultural Handler Exposure Scenario Monograph: Open Cab Groundboom Application of Liquid Sprays, DACO: 5.3,5.4
2572745	2015, Agricultural Handler Exposure Scenario Monograph: Open Pour Mixing and Loading of Liquid Formulations, DACO: 5.3, 5.4.
2770622	2017, Value assessment of IFT/MRB herbicide (isoxaflutole + metribuzin) applied pre-plant or pre-emergence on IFT-tolerant soybeans, DACO: 10.1, 10.2, 10.2.1, 10.2.2, 10.2.3, 10.2.3.2, 10.2.3.3, 10.2.3.4, 10.3.2, 10.4, 10.5.1, 10.5.2, and 10.5.3.

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