

# **Evaluation Report for Category B, Subcategory 2.6 Application**

**Application Number:** 2019-5797

**Application:** Changes to Product Labels - New End-use Product Chemistry –

New Combination of Technical Grade Active Ingredients

**Product:** Bifecta EZ Herbicide

**Registration Number:** 34422

Active ingredients (a.i.): Metribuzin and Flumioxazin

PMRA Document Number: 3313566

# **Purpose of Application**

The purpose of this application was to register a new end-use product, Bifecta EZ Herbicide, which contains a new combination of technical grade active ingredients, to control and/or supress certain weeds in burndown applications, soybeans, field peas, lentils, spring wheat, post-harvest / fall burndown, fallow cropland and to maintain bare ground on non-crop areas of farms.

## **Chemistry Assessment**

Bifecta EZ Herbicide is formulated as suspension containing metribuzin at a concentration of 347 g/L and flumioxazin at a concentration of 77.6 g/L. This end-use product has a density of 1.06 g/cm<sup>3</sup> and pH of 7.84. The required chemistry data for Bifecta EZ Herbicide have been provided, reviewed and found to be acceptable.

#### **Health Assessments**

Bifecta EZ Herbicide is considered toxicologically equivalent to the precedent product; therefore no toxicology data were required. Bifecta EZ Herbicide is considered to be of slight toxicity via the oral route, and of low toxicity via dermal and inhalation routes. It is considered to be non-irritating to the eyes and to the skin, and is considered to be a dermal sensitizer.

The registration of BifectaEZ Herbicide is not expected to result in an increase in potential occupational or bystander exposure over those from the registered uses of metribuzin and flumioxazin. 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 flumioxazin and metribuzin were submitted to support the registration of Bifecta EZ Herbicide. Previously reviewed residue data from field trials conducted in/on soybeans, field peas, lentils and spring wheat were reassessed in the framework of this application. Residues of flumioxazin and metribuzin in/on these crops are not expected to increase and will be covered under the established maximum residue limits for each of the active ingredients. Consequently, the dietary exposure to residues of flumioxazin and metribuzin is not expected to increase and will not pose health risks of concern to any segment of the population, including infants, children, adults and seniors.



#### **Environmental Assessment**

The registration of Bifecta EZ Herbicide for the control and/or suppression of certain weeds in pre-seed, pre-emergent, burndown applications, or to maintain non-crop bare ground areas is acceptable from the perspective of environmental risk when used in accordance with label directions.

#### Value Assessment

The registration of Bifecta EZ Herbicide provides users an alternative option for: burndown control of grasses and broadleaf weeds with soil residual activity in several crops; as part of a fall burndown program for residual weed control; and to maintain bare ground in non-crop areas of farms. Bifecta EZ Herbicide, which is co-formulated with two active ingredients from different modes of action groups with control of overlapping weed spectra, provides users a valuable tool that may help to manage resistant weed biotypes.

Value information submitted for review consisted of precedent registrations and data from replicated field trials conducted in the Prairie Provinces, Quebec, Ontario, and Prince Edward Island between 2018 and 2020. This information collectively demonstrated that the application of Bifecta EZ Herbicide as per the label instructions provided acceptable control of the listed weeds and did not cause unacceptable injury to the listed crops. Rotational crops are supported based on the most restrictive of the cited precedent registrations.

#### Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information sufficient to support the registration of Bifecta EZ Herbicide.

### References

PMRA Document	Reference
Number	
3040897	2019, Summary of product chemistry_Bifecta EZ, DACO: 3.1, 3.1.1, 3.1.2,
	3.1.3, 3.1.4, 3.2, 3.2.1, 3.2.2, 3.2.3, 3.5, 3.5.1
3040898	2019, Analytical Enforcement Method NUP 17070, DACO: 3.4.1 CBI
3040899	2019, Final report Accelerated Storage Stability Study 3-28-19, DACO:
	3.5.10, 3.5.14 CBI
3189516	2018, Physical and Chemical Characteristics of NUP-17070, DACO: 3.5.1,
	3.5.2, 3.5.3, 3.5.6, 3.5.7, 3.5.8, 3.5.9 CBI
3309730	2022, Bifecta EZ Herbicide: Product Identifiation and Selected Chemical
	and Physical Properties (revised), DACO: 3.2.2 CBI
3114103	2020, DACO 10 Bifecta EZ, DACO: 10.1, 10.2, 10.2.1, 10.2.3, 10.2.3.1,
	10.2.3.2(B), 10.2.4, 10.3, and 10.3.1. CBI

3189514	2021, Updated Summary of Value for Bifecta EZ Herbicide, Containing
	Flumioxazin and Metribuzin, DACO: 10.1, 10.2.1, 10.2.3.1, 10.2.3.3,
	10.3.1, 10.3.2, and 10.5.3.
3189517	Updated use Description Scenario for Bifecta EZ Herbicide (Metribuzin,
	Flumioxazin), DACO 5.2

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