

Evaluation Report for Category B, Subcategory 2.1, 2.6, 3.1, 3.11 Application

Application Number: 2015-7159
Application: New EP Product Chemistry-Guarantee, New EP Product Chemistry-New combination of TGAIs, New Product Labels-Application Rate Increase or Decrease, New Product Labels-New Pests
Product: DuPont SB-03 Herbicide
Registration Number: 32649
Active ingredients (a.i.): Chlorimuron-ethyl, Imazethapyr
PMRA Document Number: 2723053

Purpose of Application

The purpose of this application was to register a new premix formulation containing the new combination of active ingredients imazethapyr with chlorimuron-ethyl, for pre- and post-emergent weed control in soybean grown in eastern Canada.

Chemistry Assessment

DuPont SB-03 Herbicide is formulated as wettable granules containing chlorimuron-ethyl at a nominal concentration of 6.62% and imazethapyr at a nominal concentration of 55.15%. This end-use product has a density of 0.69-0.79 g/cm³ and a pH of 4.8. The required chemistry data for DuPont SB-03 Herbicide have been provided, reviewed and found to be acceptable.

Health Assessments

DuPont SB-03 Herbicide is of low toxicity to rats via the oral, dermal, and inhalation routes. It is mildly irritating to the eyes of rabbits. It is not a skin irritant of rabbits or a dermal sensitizer.

The use of the new end-use product DuPont SB-03 Herbicide on soybeans is not expected to result in potential occupational or bystander exposure over the registered use of chlorimuron-ethyl and imazethapyr. 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 were submitted in support of the registration of the new end-use product Dupont SB-03 Herbicide as it is based on a precedent and the use pattern of this end-use product was determined to be within that of the registered use patterns. Therefore, the previously reviewed data were reassessed in the framework of the current submission and it was confirmed that the use of Dupont SB-03 Herbicide is not expected to result in an increase in the magnitude of chlorimuron-ethyl and imazethapyr residues in/on the dry soybeans. Therefore, the use of Dupont SB-03 Herbicide will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

As the uses on DuPont SB-03 Herbicide falls within the existing use pattern for imazethypyr and chlorimuron-ethyl, no environmental concern were identified.

Value Assessment

Broadleaf weeds, including nightshade species, and perennial weeds, such as yellow nutsedge, are known problematic weeds for soybean growers in eastern Canada. Nightshade species in particular pose an economic risk due to the potential for staining of the soybean seeds going to market. Providing additional chemical weed control options can be beneficial to growers, particularly when multiple actives are combined and reduced rates can be used.

Efficacy and host crop tolerance data from field trials conducted in Ontario were provided for review. The provided trial data demonstrated that acceptable control of eastern black nightshade, yellow nutsedge and lamb's-quarters as well as acceptable host crop tolerance would be expected when DuPont SB-03 Herbicide is applied at the low rate (i.e., 56 g ai/ha) alone or in tank mix with glyphosate post-emergent to soybean. Furthermore, application of DuPont SB-03 Herbicide pre-plant or pre-emergent to soybean at the high rate (i.e., 84 g ai/ha) would be expected to control select broadleaf weeds as stated on the DuPont SB-03 Herbicide label. The existence of a similar unlabelled tank mix of Classic Grande Herbicide (Reg. No. 29416) and DuPont Imazethapyr 240 SL Herbicide (Reg. No. 31156), called Freestyle™ Herbicide, that has been promoted and marketed by DuPont for a number of years for pre-plant or pre-emergent use in soybean (applied at the same rates for the control of the same weeds as that for DuPont SB-03 Herbicide) further supports the expectation of acceptable weed control and host crop tolerance when DuPont SB-03 Herbicide is applied pre-plant or pre-emergent as labelled.

No rotational cropping data were provided for review. However, given that the rotational crops for DuPont SB-03 Herbicide are a blended (most restrictive) selection of crops based on the registered rotational crops for the two precedent products, the labelled DuPont SB-03 Herbicide rotational crops can be supported from a value perspective.

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 the new end-use product DuPont SB-03 Herbicide.

References

PMRA Document Number	Citation
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2596730	2015, DACO 3.1-3.2, DACO: 3.0,3.1,3.1.1,3.1.2,3.1.3,3.1.4,3.2
2596731	2015, Waiver for part 3 chemistry data, DACO: 3.2.1,3.2.2,3.2.3,3.3.1,3.4,3.4.2,3.5,3.5.1,3.5.10,3.5.11,3.5.12,3.5.13,3.5.14,3.5.15, 3.5.16,3.5.2,3.5.3,3.5.4,3.5.5,3.5.6,3.5.7,3.5.8,3.5.9
2596734	2015, validation of the analytical method for the determination of chlorimuron ethyl (DPX-F6025), Imazethapyr (DPX-YA746) and/or Flumioxazin (DPX-YL947) in DPX-U1H14 and DPX-UVK32 blends of paste-extruded product, DACO: 3.4.1
2596735	2015, validation of the analytical method for the determination of chlorimuron ethyl (DPX-F6025), Imazethapyr (DPX-YA746) and/or Flumioxazin (DPX-YL947) in DPX-U1H14 and DPX-UVK32 blends of paste-extruded product, DACO: 3.4.1
2596736	2015, Determination of chlorimuron ethyl (DPX-F6025), Imazethapyr (DPX-YA746) and/or Flumioxazin (DPX-YL947) in DPX-U1H14 and DPX-UVK32 blends of paste-extruded product, DACO: 3.4.1
2661138	2016, Waiver for part 3 Chemistry Data, DACO: 3.5.10,3.5.14,3.5.6,3.5.7,3.5.8
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1449124	1997, HED Review: Classic DF Herbicide Acute Tox package.
2597181	2014, Acute Oral Toxicity of Imazethapyr 750 WG, Lab Report No. 141989, DACO: 4.6.1
2597182	2015, Acute Dermal Toxicity of Imazethapyr 750 WG, Lab Report No. 141990, DACO: 4.6.2
2597183	2014, Imazethapyr 750 WG Acute Inhalation Toxicity in Rats, Lab Report No. 38969, DACO: 4.6.3
2597184	2014, Acute Eye Irritation/Corrosion with Imazethapyr 750 WG, Lab Report No.1 41993, DACO: 4.6.4
2597185	2014, Acute Dermal Irritation/Corrosion with Imazethapyr 750 WG, Lab Report No. 141992, DACO: 4.6.5
2597186	2015, Test for Sensitization (LLNA) with Imazethapyr 750 WG, Lab Report No. 141994, DACO: 4.6.6
2596729	2015, Value Submission, DACO: 10.1, 10.2, 10.2.1, 10.2.2, 10.2.3, 10.2.3.1, 10.2.3.3, 10.2.3.3(B), 10.3, 10.3.1, 10.3.2.

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