

Evaluation Report for Category B, Subcategory 2.1, 2.6, 3.1, 3.2, 3.5, 3.6, 3.11 Application

Application Number: 2015-6730
Application: New EP Product Chemistry: Guarantee and New Combination of TGAI; New to Product Labels: Application Rate Increase or Decrease, New Pests, Application Timing, Rotational Crops\Plantback Interval, and Pre-Harvest Interval
Product: CS-100-23235 Herbicide
Registration Number: 32575
Active ingredients (a.i.): Tribenuron-methyl, Thifensulfuron-methyl, Metsulfuron-methyl and Pyroxsulam
PMRA Document Number: 2625928

Purpose of Application

The purpose of this application was to register a new end-use product, CS-100-23235 Herbicide, containing four active ingredients: tribenuron-methyl, thifensulfuron-methyl, metsulfuron-methyl and pyroxsulam. This product is for early postemergence application by ground equipment to control broadleaf and grassy weeds in spring and durum wheat grown in the Prairie Provinces and the Interior of British Columbia.

Chemistry Assessment

CS-100-23235 Herbicide is formulated as wettable granules containing tribenuron-methyl at nominal concentration of 7.3%, thifensulfuron-methyl at nominal concentration of 7.3%, metsulfuron-methyl at nominal concentration of 1.5% and pyroxsulam at nominal concentration of 14.7%. This end-use product has a density of 0.47-0.67 g/mL and pH of 4-7. The required chemistry data for CS-100-23235 Herbicide have been provided, reviewed and found to be acceptable.

Health Assessments

CS-100-23235 Herbicide is considered to be of low acute toxicity by the oral, dermal, and inhalation routes. It is considered to be mildly irritating to the eye and slightly irritating to the skin. It is considered to be a potential dermal sensitizer.

The use pattern of the end-use product fits within the registered use pattern for pyroxsulam, tribenuron-methyl, metsulfuron-methyl and thifensulfuron-methyl. The potential exposure to pyroxsulam, thifensulfuron-methyl, tribenuron-methyl and metsulfuron-methyl for mixers/loaders, applicators and postapplication re-entry workers is not expected to result in risks of concern from the use of CS-100-23235 Herbicide.

The use pattern on the CS-100-23235 Herbicide label is identical to, or more restrictive than, the registered use patterns on the labels of the precedent products. Therefore, residues of these active substances in/on treated commodities are not expected to increase and will be covered under the maximum residue limits (MRLs) currently established. Consequently, the dietary exposure to residues of pyroxsulam, thifensulfuron-methyl, tribenuron-methyl and metsulfuron-methyl is not expected to increase with the registration of CS-100-23235 Herbicide and will not pose health risks of concern to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

The rates, number of applications and application methods for pyroxsulam, thifensulfuron-methyl, tribenuron-methyl and metsulfuron-methyl in CS-100-23235 Herbicide are within those registered for the active ingredients alone or in combination on other registered product labels. Environmental concerns have been mitigated through appropriate statements on the product label.

Value Assessment

CS-100-23235 Herbicide will offer a one-pass application for the control of both broadleaf and grassy weeds. This end-use product will be dispensed through a PrecisionPac system, which will allow dispensing in volumes based on field size or sprayer tank size, thereby reducing product waste and packaging, and minimizing sprayer errors (e.g. rate calculations). CS-100-23235 Herbicide is compatible with integrated pest management programs, and may be used with conventional tillage, minimum tillage and no-till systems. CS-100-23235 Herbicide contains the active ingredient pyroxsulam, which is a Group 2 graminicide. As some wild oat populations have developed resistance to Group 1 Herbicides, this pyroxsulam-containing product will offer an alternative mode of action for the control of wild oats.

Efficacy data from seven field trials conducted in 2014-2015 across locations in western Canada were provided to demonstrate that CS-100-23235 Herbicide, with or without the addition of a reduced rate of MCPA ester, would not result in wild oat antagonism. Based on the wild oat data that were provided for review, in conjunction with existing precedent product registrations and the applicant's attestation to several years of positive grower use history with certain precedent product tank mix combinations, adequate control or suppression of all labelled weeds would be expected.

Host crop tolerance data from seven field trials demonstrated that CS-100-23235 Herbicide applied alone or in tank mix with a reduced rate of MCPA ester would provide acceptable spring wheat tolerance. Based on the spring wheat data that were provided, in conjunction with existing precedent product registrations, adequate tolerance of both spring and durum wheat to CS-100-23235 Herbicide would be expected.

A scientific rationale was provided in support of some of the rotational cropping claims for CS-100-23235 Herbicide. The remainder of the claims fit within the current use pattern of registered products. Accordingly, the most restrictive rotational cropping interval of the registered use pattern was used for defining the rotational cropping claims for CS-100-23235 Herbicide. The same reasoning was used to support a rainfastness claim of 2 hours for CS-100-23235 Herbicide.

Conclusion

The PMRA has reviewed the available information in support of this application and has determined that the registration of the end-use product, CS-100-23235 Herbicide, can be supported.

References

- | PMRA Document Number | Reference |
|----------------------|---|
| 2589062 | 2015, CS-Blend 3 Herbicide: Request for Waiver of Part 3 Chemistry Data, DACO:
3.0,3.5,3.5.1,3.5.10,3.5.11,3.5.12,3.5.13,3.5.14,3.5.15,3.5.2,3.5.3,3.5.4,3.5.5,3.5.6,3.5.7,3.5.8 CBI |
| 2589063 | 2015, CS-Blend 3 Herbicide: Part 3.1-3.2 Chemistry, 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 CBI |
| 2589064 | 2015, Determination of Thifensulfuron methyl (DPX-M6316), Tribenuron methyl (DPX-L5300), Metsulfuron methyl (DPX-T6376), Pyroxsulam (DPX-QGM08) and Cloquintocet Acid in DPX-TMT56, DPX-TMT62, DPX-TMT63 and DPX-TMT66 Blends of Paste-Extruded Products, DACO: 3.4,3.4.1 CBI |
| 2589065 | 2015, Validation of the Analytical Method for Determination of Thifensulfuron methyl (DPX-M6316), Tribenuron methyl (DPX-L5300), Metsulfuron methyl (DPX-T6376), Pyroxsulam (DPX-QGM08) and Cloquintocet Acid in DPX-TMT56, DPX-TMT62, DPX-TMT63 and DPX-TMT66 Blends of Paste-Extruded Products, DACO: 3.4,3.4.1 CBI |
| 2589066 | 2015, Validation of the Analytical Method for Determination of Thifensulfuron methyl (DPX-M6316), Tribenuron methyl (DPX-L5300), Metsulfuron methyl (DPX-T6376), Pyroxsulam (DPX-QGM08) and Cloquintocet Acid in DPX-TMT56, DPX-TMT62, DPX-TMT63 and DPX-TMT66 Blends of Paste-Extruded Products, DACO: 3.4,3.4.1 CBI |
| 2589067 | 2015, Rationale to Support Upper and Lower Limits for CS-Blend 3 Herbicide, DACO: 3.4,3.4.1 CBI |
| 2589068 | 2015, CS-Blend 3 Herbicide: Request for Waiver of Storage Stability and Corrosion Characteristics Studies, DACO: 3.5.10,3.5.14 CBI |
| 2619921 | 2016, DuPont Response to Clarification (pH), DACO: 3.5.7 CBI |
| 2589060 | 2015, Efficacy and Crop Tolerance of DuPont Herbicide Blends Containing Pyroxsulam for Use on Wheat (Spring and Durum), 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), 10.3.2, 10.3.2(A). |
| 2670139 | 2016, Rationale for Request to Waive Requirements for Part 6.3 (Plant Metabolism) and Part 7.4.1 (Crop Residue) for Herbicide Blends Containing Thifensulfuron-Methyl, Tribenuron-Methyl, Metsulfuron-Methyl, Pyroxsulam and Cloquintocet Acid on Wheat, DACO: 6.3,7.4.1 |

ISSN: 1911-8082

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