

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

Application Number: 2015-6731
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-100-31155 Herbicide
Registration Number: 32576
Active ingredients (a.i.): Tribenuron-methyl, Thifensulfuron-methyl, Metsulfuron-methyl and Pyroxsulam
PMRA Document Number: 2626031

Purpose of Application

The purpose of this application was to register a new end-use product, CS-100-31155 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-100-31155 Herbicide is formulated as wettable granules containing tribenuron-methyl at nominal concentration of 4.9%, thifensulfuron-methyl at nominal concentration of 9.8%, metsulfuron-methyl at nominal concentration of 1.5% and pyroxsulam at nominal concentration of 14.7%. This end-use product has a density of 0.48-0.68 g/mL and pH of 4-7. The required chemistry data for CS-100-31155 Herbicide have been provided, reviewed and found to be acceptable.

Health Assessments

CS-100-31155 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 the CS-100-31155 Herbicide.

The use pattern on the CS-100-31155 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-100-31155 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-100-31155 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-100-31155 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-100-31155 Herbicide is compatible with integrated pest management programs, and may be used with conventional tillage, minimum tillage and no-till systems. CS-100-31155 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-100-31155 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-100-31155 Herbicide applied alone would provide acceptable spring wheat tolerance. Further data were also provided to demonstrate that adequate spring wheat tolerance to CS-Blend 4 Herbicide in tank mix with a reduced rate of MCPA ester would be expected. 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-100-31155 Herbicide would be expected.

A scientific rationale was provided in support of some of the rotational cropping claims for CS-100-31155 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-100-31155 Herbicide. The same reasoning was used to support a rainfastness claim of 2 hours for CS-100-31155 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-100-31155 Herbicide, can be supported.

References

PMRA #	Reference
2589085	2015, CS-Blend 4 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
2589086	2015, CS-Blend 4 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
2589087	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
2589088	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
2589089	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
2589090	2015, Rationale to Support Upper and Lower Limits for CS-Blend 4 Herbicide, DACO: 3.4,3.4.1 CBI
2589091	2015, CS-Blend 4 Herbicide: Request for Waiver of Storage Stability and Corrosion Characteristics Studies, DACO: 3.5.10,3.5.14 CBI
2622808	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

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