

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

**Application Number:** 2015-6735

**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-75-3317 Herbicide

**Registration Number:** 32578

**Active ingredients (a.i.):** Tribenuron-methyl, Thifensulfuron-methyl and Pyroxsulam

**PMRA Document Number:** 2626437

### Purpose of Application

The purpose of this application was to register a new end-use product, CS-75-3317 Herbicide, containing three active ingredients: tribenuron-methyl, thifensulfuron-methyl and pyroxsulam. This product is for early postemergence application by ground and aerial 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-75-3317 Herbicide is formulated as wettable granules containing tribenuron-methyl at nominal concentration of 6.1%, thifensulfuron-methyl at nominal concentration of 12.2%, and pyroxsulam at nominal concentration of 13.6%. This end-use product has a density of 0.48-0.68 g/mL and pH of 4.3-7.3. The required chemistry data for CS-75-3317 Herbicide have been provided, reviewed and found to be acceptable.

### Health Assessments

CS-75-3317 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 new end-use product fits within the registered use pattern for pyroxsulam, tribenuron-methyl, as well as application of thifensulfuron-methyl using ground equipment. The aerial application rate on wheat is an expansion of use for thifensulfuron-methyl in CS-75-3317 Herbicide. A chemical handler risk assessment was conducted and there were no risks to human health associated with this use. The potential exposure to pyroxsulam, thifensulfuron-methyl, and tribenuron-methyl for mixers/loaders, applicators and postapplication re-entry workers is not expected to result in risks of concern from the use of CS-75-3317 Herbicide.

The use pattern on the CS-75-3317 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 and tribenuron-methyl is not expected to increase with the registration of CS-75-3317 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 and tribenuron-methyl in CS-75-3317 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-75-3317 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-75-3317 Herbicide is compatible with integrated pest management programs, and may be used with conventional tillage, minimum tillage and no-till systems. CS-75-3317 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-75-3317 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-75-3317 Herbicide applied alone would provide acceptable spring wheat tolerance. Further data were also provided to demonstrate that adequate spring wheat tolerance to CS-75-3317 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-75-3317 Herbicide would be expected.

No rotational cropping information was provided for CS-75-3317 Herbicide. However, given that CS-75-3317 Herbicide is fit within the current use pattern of registered products, most restrictive rotational cropping interval of the registered use pattern was used for defining the rotational cropping claims for CS-75-3317 Herbicide. The same reasoning was used to support a rainfastness claim of 2 hours for CS-75-3317 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-75-3317 Herbicide, can be supported.

## References

### PMRA Document Number Reference

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- 2589138 2015, CS-Blend 6 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
- 2589140 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
- 2589142 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
- 2589143 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
- 2589144 2015, Rationale to Support Upper and Lower Limits for CS-Blend 6 Herbicide, DACO: 3.4,3.4.1 CBI
- 2589145 2015, CS-Blend 6 Herbicide: Request for Waiver of Storage Stability and Corrosion Characteristics Studies, DACO: 3.5.10,3.5.14 CBI
- 2622815 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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