

Evaluation Report for Category B, Subcategory B.2.6 Application

Application Number: 2007-4610

Application: B.2.6 : New End-use Product – New combination of TGAIs

Product: PP-23235 Herbicide

Registration Number: 29262

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

methyl

PMRA Document Number: 1721130

Purpose of Application

The purpose of this application is to register the new end-use product PP-23235 Herbicide for use in spring wheat, durum wheat and spring barley to control specific broadleaf weeds.

Chemistry Assessment

PP-23235 Herbicide, is formulated as a wettable granule containing thifensulfuron-methyl, tribenuron-methyl and metsulfuron-methyl at nominal concentrations of 23.1%, 23.1% and 4.6% respectively. This end-use product has a pour density of 0.57 - 0.67 g/cm3 and pH of 7.5. The chemistry requirements for PP-23235 Herbicide are complete.

Health Assessments

The waiver for acute toxicity studies with PP-23235 Herbicide was found to be acceptable, based on the availability of complete acute toxicity studies for the three registered manufacturing use products present in this end-use product. Therefore, no additional toxicological data were required.

No new residue data were submitted to support the registration of the new end-use product PP-23235 Herbicide, a formulation containing thifensulfuron methyl, tribenuron methyl and metsulfuron methyl for use on wheat and barley. PP-23235 Herbicide has a different guarantee than currently registered products containing these active ingredients. However, the proposed rates for each active ingredient in PP-23235 Herbicide are within the currently registered rates. All other aspects of the use pattern remain the same. The disposition, translocation and magnitude of the residues of each a.i. are not expected to be affected when they are formulated together. Therefore, the dietary risk is not expected to increase and the new formulation will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.



Metsulfuron methyl, thifensulfuron methyl and tribenuron methyl are currently registered for similar use at equivalent or higher rates. Potential exposure for mixer/loader/applicators or for post application activities would likely not increase over the registered use patterns.

Environmental Assessment

An environmental assessment of PP-23235 Herbicide for use on broadleaf weeds in wheat (spring and durum) and spring barley in Western Canada, was not required since the use pattern (application rates, number of applications and use areas) is the same as that currently registered. Thus, there will be no increase in environmental exposure. Environmental concerns have been mitigated through adequate statements on the product label but may undergo revision based upon the re-evaluation of tribenuron methyl.

Value Assessment

Value data consisting of efficacy, crop tolerance and rotational cropping trials were submitted to establish the efficacy of PP-23235 Herbicide on proposed broadleaf weeds, to establish the crop safety of this end-use product on spring wheat, durum wheat and spring barley and to establish a re-cropping profile. In addition to the data provided, the review of PP-2525 Herbicide (containing thifensulfuron-methyl+ tribenuron-methyl - Application # 2007-4608) was used to establish some of the efficacy claims made on the PP-23235 Herbicide label for weeds controlled by PP-2525 Herbicide.

Efficacy data were submitted from 7 trials conducted in 2004, 2005 and 2006 at 7 different locations in Alberta, Saskatchewan and Manitoba. The data provided support the claim of control of lady's thumb, lamb's quarters, redroot pigweed, kochia (non-group 2 resistant types), wild buckwheat, wild mustard, volunteer rapeseed (except Clearfield biotypes), stinkweed, hempnettle, stork's bill and a claim of suppression of Canada thistle and Russian thistle with an early post-emergence application with the proposed rates of 7.5 g a.i./ha of thifensulfuronmethyl + 7.5 g a.i./ha of tribenuron-methyl + 1.5 g a.i./ha metsulfuron-methyl.

Crop phytotoxicity data were available from 8 trials conducted between 2004 and 2006 inclusive at 6 different locations in Alberta, Saskatchewan and Manitoba to assess the crop tolerance of spring wheat, durum wheat and spring barley following applications of PP-23235 Herbicide. The data provided support the tolerance of spring wheat, durum wheat and spring barley to a post-emergence application of PP-23235 Herbicide.

Crop tolerance of rotational crops was determined based on the active ingredient metsulfuronmethyl, which has the highest re-cropping restrictions of the three active ingredients present in PP-23235 Herbicide. The combined minimum re-cropping restrictions for Express Pro Herbicide (Reg. No. 29212) and Ally 60 DF Herbicide (Reg. No. 20214) of 10 months following an application of PP-23235 Herbicide for barley, durum wheat, spring wheat, lentil, canola, pea and flax; 48 months for alfalfa, canary seed, red clover and yellow mustard; and either 10 months on soils of pH 6.9 or lower or 22 months for soils with pH 7.0-7.9 for oat, following an application of PP-23235 Herbicide can be supported

Conclusion

PP-25253 Herbicide is acceptable for full registration.

References

1444692	2007. Value Summary. DACO's: 10.1, 10.2.3.3, 10.3.2
1459978.	2007, PP-23235 Herbicide: Request for Waiver of Part 4 Toxicology - Acute Studies, n/a, MRID: n/a, DACO: 4.6
1459976	2007, PP-23235 Herbicide: Request for Waiver of Part 3 Chemistry Data, n/a, MRID: n/a, DACO: 3.0
1459977	2007, PP-23235 Herbicide Part 3.1 - 3.2 (Chemistry), n/a, MRID: n/a, 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
857087	2004, Tribenuron Methyl 50SG Water Soluble Granular Herbicide Formulation: Laboratory Study of Physical and Chemical Properties, Dupont-11674, MRID: N/S, DACO: 3.5 CBI
832683	Thifensulfuron Methyl/Tribenuron methyl 50SG (33.3/16.7% active ingredient ratio) Water-soluble Granular Blend of Herbicide Formulations: Laboratory Study of Physical and Chemical Properties. Date Study Completed: July 8, 2003. du Pont-12260, DACO: 3.5 CBI
1604081	1999, Summary Report of Physical and Chemical Characteristics of End-Use Product Metsulfuron Methyl 60% Herbicide Formulation, DuPont-2489, MRID: n/a, DACO: 3.5,3.5.1,3.5.2,3.5.3,3.5.6,3.5.7
1044736	Thifensulfuron Methyl 50SG Tribenuron Methyl 50SG 1:1 End Use Product Herbicide Blend Formulation: Laboratory Study of Storage Stability and Corrosion Characteristics, 13296, DACO: 3.5.10,3.5.14 CBI
1604083	2000, Storage Stability and Corrosion Characteristics of End-Use Product Metsulfuron Methyl 60% Herbicide Formulation, DuPont-2490, MRID: n/a, DACO: 3.5.10,3.5.14
832430	2004, Product Identity of End Use Product Thifensulfuron methyl 50SG/tribenuron methyl 50SG(DPX-R9674), a 2 to 1 Blend of Paste Extruded Granules(33.4% + 16.6% Active), Dupont-14050, MRID: N/S, DACO: 3.2,3.3.1 CBI
864672	2003, Product Identity and Composition of End-Use Product Tribenuron Methyl 50SG, Dupont-12816, MRID: N/S, DACO: 3.2 CBI

864673	2003, Product Identity and Composition of End-Use Product Thifensulfuron Methyl 50SG, Dupont-12821, MRID: N/S, DACO: 3.2 CBI
857083	2003, Product Identity and Composition of End-Use Product Tribenuron Methyl 50SG, Dupont-12816, MRID: N/S, DACO: 3.2,3.3.1 CBI
1604076	2001, Product Identity and Composition of End-Use Product Metsulfuron Methyl 60 WG (Paste Extruded Granule) CONFIDENTIAL ATTACHMENT, DuPont-4548 RV1, MRID: n/a, DACO: 3.2,3.2.1,3.2.2,3.2.3,3.3.1 CBI
832431	2004, Validation of the HPLC/UV analytical method to verify the certified true limits of thifensulfuron methyl (DPX M6316), tribenuron methyl(DPX-L5300), and metsullfuron methyl(DPX T-6376) in WG and SG blended end-use products, DuPont-12950 RV 1, MRID: N/A, DACO: 3.4.1

ISSN: 1911-8082

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