



Evaluation Report for Category C, Subcategory 3.10 Application

Application Number: 2012-4606
Application: New tank mix
Product: Metsulfuron Methyl EUP Herbicide 60% Dry Flowable
Registration Number: 25579
Active ingredients (a.i.): metsulfuron methyl
PMRA Document Number : 2274101

Background

Metsulfuron-methyl EUP Herbicide 60% Dry Flowable was first registered on July 30, 1998. It is registered for post-emergence application in spring wheat, including durum, and spring barley at 7.5 g/ha for broad-leaved weed control. This herbicide may be applied in tank mixtures with other herbicides in these crops for broader spectrum weed control. Use of a non-ionic surfactant at 0.2% v/v is required except for particular tank mixtures. Metsulfuron-methyl EUP Herbicide 60% Dry Flowable is also registered for application to established creeping red fescue grown for seed or forage, forage grasses for feed or seed production, as well as to pasture, rangeland and non-crop areas. For specific details of uses, application rates and methods, precautions, restrictions, and personal protective equipment requirements, refer to the product label.

Purpose of Application

The purpose of this application was to amend the registration of Metsulfuron Methyl EUP Herbicide 60% Dry Flowable to include a tank mixture of Metsulfuron Methyl EUP Herbicide 60% Dry Flowable at the reduced rate of 1.5 g a.i./ha plus 15 g a.i./ha M6316 SG Herbicide (Reg. No. 28730), containing 50% thifensulfuron-methyl, + 70 g a.e./ha Perimeter[®] II Herbicide (Reg. No. 30094), containing 333 g a.e./L fluroxypyr, + 0.2% v/v non-ionic surfactant applied post-emergence in spring wheat, including durum, and spring barley in the Prairie provinces and the Peace River region of B.C. for control of narrow-leaved hawk's-beard plus other weeds controlled by M6316 SG Herbicide or Perimeter II Herbicide at their respective rates.

Chemistry, Health and Environmental Assessments

A chemistry assessment was not required since there was no change to product chemistry. Health and environmental assessments were not required since the use pattern, including use sites, application timings, and maximum application rates remained unchanged.

Value Assessment

Data were submitted from 14 replicated field trials conducted in 2012 across the Prairie region in which the efficacy of a tank mixture of a reduced rate of Metsulfuron Methyl EUP Herbicide (1.5 g a.i./ha) plus registered rates of M6316 SG Herbicide (15 g a.i./ha) and Perimeter II

Herbicide (70 g a.e./ha) plus 0.2% v/v non-ionic surfactant applied to spring wheat, durum wheat and spring barley was evaluated for control of narrow-leaved hawk's beard and other broadleaved weeds for which there are registered control claims for M6316 SG Herbicide or Perimeter II Herbicide applied at their respective rates. The data demonstrated that application of the tank mix resulted in:

- consistent control of narrow-leaved hawk's beard over four trials;
- control of cleavers (4 trials) that was similar to that observed for Perimeter II Herbicide applied at 70 g a.e./ha, for which a claim of cleavers control is registered at that rate; and,
- control of other weeds, including volunteer canola (5 trials) and wild buckwheat (11 trials), was similar to that observed for M6316 SG Herbicide applied at 15 g a.i./ha and for which claims of control of those weeds are registered at that rate.

An adequate margin of crop safety to the tank mixture of 1.5 g a.i./ha Metsulfuron Methyl EUP Herbicide plus 15 g a.i./ha M6316 SG Herbicide plus 70 g a.e./ha Perimeter II Herbicide plus 0.2% v/v non-ionic surfactant was observed. This was expected since the component herbicides are each registered for post-emergence application alone to spring wheat, including durum, and spring barley at the same or higher rates.

Narrow-leaved hawk's beard, common in more northerly regions of the Prairies, is a summer or winter annual that is a prolific seed producer. It is becoming an increasing problem in zero and reduced tillage systems as the lack of tillage does not provide any opportunity to disrupt its life cycle. The availability of the subject tank mixture will provide farmers an additional option for control of narrow-leaved hawk's beard while controlling cleavers and other broadleaved weeds.

Conclusions

The PMRA has completed an evaluation of the subject application and has found the submitted information sufficient to amend the registration of Metsulfuron Methyl EUP Herbicide 60% Dry Flowable to include a tank mixture of it at the reduced rate of 1.5 g a.i./ha plus 15 g a.i./ha M6316 SG Herbicide + 70 g a.e./ha Perimeter® II Herbicide + 0.2% v/v non-ionic surfactant applied post-emergence in spring wheat, including durum, and spring barley in the Prairie provinces and the Peace River region of B.C. for control of narrow-leaved hawk's-beard plus other weeds controlled by M6316 SG Herbicide or Perimeter II Herbicide at their respective rates.

References:

List of Studies/Information Submitted by Registrant

Value Assessment

224415 0	2012, Efficacy and Crop Tolerance of a Tank Mix of Metsulfuron Methyl EUP Herbicide + M6316 SG Herbicide + Perimeter II Herbicide in Spring Wheat and Barley, DACO: 10.2.3.3,10.2.3.3(B),10.3.2(A)
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