

Evaluation Report for Category C, Subcategory 3.10 (tank mixtures) Application

Application Number: 2006-3092
Application: Evaluation Report for Category C, Subcategory 3.10 (tank mixtures)
Product: Define DF 60% WDG Herbicide
Registration Number: 28293
Active ingredients (a.i.): flufenacet at 60%
PMRA Document Number: 1380597

Background

Define DF Herbicide has been registered since May 11, 2006. Define DF Herbicide is registered for pre-emergence or early post-emergence use in field corn in Eastern Canada for the control of green foxtail and suppression of redroot pigweed and lamb's-quarters. Define DF will not control emerged weeds, but will provide residual control for new flushes of weeds. 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 submission is to add a tank-mix with Option 2.25 OD (Reg. No. 27424) + liquid nitrogen fertilizer (28% UAN) + Aatrex Nine-0 (Reg. No. 14842) or Aatrex Liquid 480 (Reg. No. 18450) to the label. This tank-mix is to be applied post-emergence on field corn, up to and including the 3-leaf stage of the crop for the control of 7 broadleaf and 4 grassy weed species. These eleven weed species currently appear on the Option 2.25 OD label, as controlled by the foramsulfuron + atrazine two-way tank-mix. Therefore, the value of the proposed three-way tank-mix for the control the same weed spectrum is questionable. However, the application rates for flufenacet and foramsulfuron in the three-way tank-mix are 10-28 % and 57 %, respectively, lower than the rates in the two-way tank-mix. Therefore, from a sustainability perspective, this three-way tank-mix shows value.

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 host crops, application rates and timings, of the component products remained unchanged.

Value Assessment

Data were submitted from 35 field trials conducted in 2004 and 2005 in Ontario and Quebec. Efficacy and crop safety of the proposed tank mixture were directly compared to that of the registered Elim EP (Reg. No. 23518) + Dual II Magnum (Reg. No. 25729) + Banvel II (Reg. No. 23957) tank mixture.

The performance of the proposed tank mixture was acceptable and similar to that of the Elim EP + Dual II Magnum + Banvel II tank mixture in terms of control of weed species listed on the Define DF label as controlled by this three-way tank-mixture. Performance was also acceptable and similar in terms of crop safety, assessed as both crop injury and yield.

Conclusions

The PMRA has completed an evaluation of the subject application and has found the information sufficient to amend the registration of Define DF Herbicide to include the tank mixture of Define DF Herbicide with Option 2.25 OD + liquid nitrogen fertilizer (28% UAN) + Aatrex Nine-0 or Aatrex Liquid 480.

References

A. LIST OF STUDIES/INFORMATION SUBMITTED BY REGISTRANT

PMRA # 1219993 DACO's 10.1, 10.2, 10.2.1, 10.2.2, 10.2.3, 10.2.3.1, 10.2.3.3, 10.3, 10.3.1, 10.3.2(A). Value Summary. 416 pp.

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