

Evaluation Report for Category B, Subcategory B.3.10 Application (New or Changes to Product Label – Tank Mixes)

Application Number: 2014-1645
Application: Category B, Subcategory B.3.10 (new or changes to product label – tank mixes)
Product: Aim EC Herbicide
Registration Number: 28573
Active ingredients (a.i.): 240 g/L carfentrazone-ethyl
PMRA Document Number : 2441526

Background

Aim EC Herbicide is registered as a pre-plant burndown application and hooded application for control of broadleaf weeds in a wide range of crops and crop groups and as a harvest aid in small grain cereals, dried shelled pea and bean, and potatoes. 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 Aim EC Herbicide label to include a tank mixture of Aim EC at 36.5-73 mL/ha + Pyroxasulfone 85WG at 118 g/ha for early season (pre-plant or pre-emergent) control of common lamb's-quarters, redroot pigweed, green pigweed, common ragweed, and green foxtail in glyphosate tolerant corn and glyphosate tolerant soybeans. A planned in-crop application of glyphosate herbicide should follow this use for season long control.

Chemistry, Health, and Environmental Assessments

Chemistry, health, and environmental assessments were not required as there was no change to product chemistry, product formulation, or use pattern.

Value Assessment

Value information included data from seven combined efficacy and crop tolerance trials conducted by Guelph University in Ontario in 2011, 2012, and 2013. Mean common lamb's-quarters, redroot pigweed, green pigweed, common ragweed, and green foxtail control following the pre-plant or pre-emergent application of Aim EC Herbicide + Pyroxasulfone 85WG was acceptable in these trials.

Crop % injury to glyphosate tolerant corn and glyphosate tolerant soybeans was investigated in five and two trials, respectively. Injury was not observed for any treatments in any trials.

Carfentrazone, the active ingredient in Aim EC Herbicide, is a Group 14 herbicide and pyroxasulfone, the active ingredient in Pyroxasulfone 85WG Herbicide, is a Group 15 herbicide. The application of this tank mixture as a set-up treatment for glyphosate tolerant corn and soybean will reduce the risk of resistance to other herbicide mode of action, especially glyphosate which is extremely important to corn and soybean productions.

Based on the weight of evidence, the inclusion of control claims for common ragweed, green foxtail,

lamb's-quarters, redroot pigweed, and green pigweed with a pre-plant or pre-emergent application of Aim EC Herbicide + Pyroxasulfone 85WG Herbicide in glyphosate tolerant corn and soybean on the Aim EC Herbicide label is supported from a value standpoint.

Conclusion

The PMRA has completed an assessment of the subject application and has found the information sufficient to amend the registration of Aim EC Herbicide to include control claims for common ragweed, green foxtail, lamb's-quarters, redroot pigweed, and green pigweed with a pre-plant or pre-emergent application of Aim EC Herbicide + Pyroxasulfone 85WG Herbicide in glyphosate tolerant field corn and soybeans.

Reference

List of Studies/Information Submitted by Registrant

PMRA # 2425561 2014, Efficacy of carfentrazone (Aim EC Herbicide) and pyroxasulfone (Pyroxasulfone 85 WG Herbicide) for early season control of common lamb's-quarters, redroot pigweed, green pigweed, common ragweed, and green foxtail in corn and soybeans. DACO: 10.1, 10.2, 10.2.1, 10.2.2, 10.2.3, 10.2.3.3, 10.2.3.3(B), 10.3, 10.3.1, 10.3.2, 10.3.2(A), 10.4, 10.5, 10.5.1, 10.5.2, 10.5.3, 10.5.4, and 10.5.5.

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