



Evaluation Report for Category C, Subcategory 3.10 Application

Application Number: 2007-4424
Application: Category C, Subcategory 3.10, 3.11 and 3.12
Product: Touchdown iQ Liquid Herbicide
Registration Number: 27192
Active ingredients (a.i.): Glyphosate present as diammonium salt at 360 g/L
PMRA Document Number: 1590154

Background

A number of glyphosate products are registered for use in glyphosate tolerant corn. Many of these glyphosate products are also registered for use in tank mixture with residual herbicides for residual weed control in glyphosate tolerant corn.

The tank mixes of CALLISTO 480SC (PCP 27833) at 100 g a.i./ha + glyphosate at 900 g a.e./ha and CALLISTO 480SC at 100 g a.i./ha + AATREX Liquid 480 (PCP 18450) at 280 g a.i./ha + glyphosate at 900 g a.e./ha are registered for post-emergence application to glyphosate tolerant corn from the crop 3- to 8-leaf stage. These tank mixes include the registration of the following glyphosate products: Roundup Original, Roundup Transorb, Glyfos, Credit Plus, Vantage, Vantage Plus, and Renegade.

The tank mix of PRIMEXTRA II Magnum (PCP 25730) at 1800 g a.i./ha + glyphosate at 900 g a.e./ha is registered for post-emergence application to glyphosate tolerant corn up to and including the crop 6-leaf stage. The following glyphosate products are registered for these tank mixes: Roundup Original, Roundup Transorb, Glyfos, Credit Plus, Vantage, Vantage Plus, and Renegade.

DUAL II Magnum (PCP 25729) is registered in a tank mixture with various glyphosate products for preplant surface and pre-emergent applications to corn and soybeans. The tank mix of Dual Magnum/Dual II Magnum at 1144 - 1601 g a.i./ha + glyphosate at 900 g a.e./ha has not been registered for post-emergence use. DUAL II Magnum and Touchdown Total Herbicide would provide post-emergent weed control that would 'burndown' emerged weeds and provide residual control of grass weeds that emerge throughout the season.

AATREX Liquid 480 Herbicide (PCP 18450) at 750 - 1000 g a.i./ha and Marksman Herbicide (PCP 19349) at 1000 - 1484 g a.i./ha are each registered for use in tank mix with other glyphosate products at 900 g a.e./ha for post-emergent application to glyphosate tolerant corn up to and including the crop 5-leaf stage.

For specific details of uses, application rates and methods, precautions, restrictions, and personal protective equipment requirements, refer to the product label.

Purpose of Application

Two applications were submitted to amend the registration of Touchdown iQ Herbicide to include post-emergent applications of 900 g a.e./ha, sequential rates of 900 + 900 g a.e./ha and 1800 g a.e./ha to glyphosate tolerant corn. The requested amendment included application of Touchdown iQ Herbicide applied alone and in the following tank mixes:

- 1) Touchdown iQ Liquid at 900 g a.e./ha + Callisto 480SC at 100 g a.i./ha + Agral 90 at 0.2% v/v;
- 2) Touchdown iQ Liquid at 900 g a.e./ha + Callisto 480SC at 100 g a.i./ha + Aatrex Liquid 480 at 280 g a.i./ha + Agral 90 at 0.2% v/v;
- 3) Touchdown iQ Liquid at 900 g a.e./ha + Dual Magnum or Dual II Magnum at 1144 - 1601 g a.i./ha;
- 4) Touchdown iQ Liquid at 900 g a.e./ha + Primextra II Magnum at 1800 g a.i./ha;
- 5) Touchdown iQ Liquid at 900 g a.e./ha + Aatrex Liquid 480 at 768 -1008 g a.i./ha + Agral 90 at 0.2% v/v; and
- 6) Touchdown iQ Liquid at 900 g a.e./ha + Marksman at 1000 - 1484 g a.i./ha

Chemistry Assessment

A chemistry assessment was not required since there was no change to product chemistry.

Health Assessments

Glyphosate (as the potassium salt) is already registered for use on glyphosate tolerant (GT) corn at a maximum rate of 1800 g a.e./ha and the end-use products Marksman Herbicide, Aatrex Liquid 480 Herbicide, Callisto 480SC Herbicide, Dual II Magnum Herbicide and Primextra II Magnum are also registered as tank-mix partners at equivalent or higher rates on GT corn.

Based on previously assessed information, the disposition, translocation and magnitude of the residues of dicamba, atrazine, mesotrione or s-metolachlor are not expected to be affected when these are tank-mixed with Touchdown iQ and applied on GT corn. No additional dietary risk from any of these active ingredients is anticipated.

Accordingly, from a food residue perspective, the increase in the application rate to 1800 g a.e./ha and the addition of the tank-mix partners, Marksman Herbicide, Aatrex Liquid 480 Herbicide, Callisto 480SC Herbicide, Callisto 480SC Herbicide + Aatrex Liquid 480 Herbicide, Dual II Magnum Herbicide and Primextra II Magnum, on the Touchdown iQ label can be supported.

Environmental Assessment

An environmental assessment was not required as the requested amendment to the registration of Touchdown iQ Herbicide fell within the registered use pattern for glyphosate.

Value Assessment

Data from 70 trials (combined 42 efficacy trials and 28 dedicated crop tolerance trials) were submitted for review. In terms of both efficacy, assessed as percent control, and crop safety, assessed as percent injury and grain yield, the performance of Touchdown iQ Herbicide applied post-emergent on its own or in combination with other herbicides with residual activity was similar to that of other registered glyphosate products applied alone or in tank mixture with the same herbicides.

Conclusion

The PMRA has completed an evaluation of the subject application and has found the information sufficient to amend the registration of Touchdown iQ Herbicide to include post-emergent applications of 900 g a.e./ha, sequential rates of 900 + 900 g a.e./ha and 1800 g a.e./ha to glyphosate tolerant corn. The amendment to the registration includes the addition of the following tank mixes, also for post-emergent use on glyphosate tolerant corn.

- 1) Touchdown iQ Liquid at 900 g a.e./ha + Callisto 480SC at 100 g a.i./ha + Agral 90 at 0.2% v/v;
- 2) Touchdown iQ Liquid at 900 g a.e./ha + Callisto 480SC at 100 g a.i./ha + Aatrex Liquid 480 at 280 g a.i./ha + Agral 90 at 0.2% v/v;
- 3) Touchdown iQ Liquid at 900 g a.e./ha + Dual Magnum or Dual II Magnum at 1144 - 1601 g a.i./ha;
- 4) Touchdown iQ Liquid at 900 g a.e./ha + Primextra II Magnum at 1800 g a.i./ha;
- 5) Touchdown iQ Liquid at 900 g a.e./ha + Aatrex Liquid 480 at 768 -1008 g a.i./ha + Agral 90 at 0.2% v/v; and
- 6) Touchdown iQ Liquid at 900 g a.e./ha + Marksman at 1000 - 1484 g a.i./ha

References

A. LIST OF STUDIES/INFORMATION SUBMITTED BY REGISTRANT

HEALTH

none

VALUE

- | | |
|---------------|---|
| PMRA# 1432033 | 2007, TOUCHDOWN TOTAL - SUMMARY OF EFFICACY TRIALS - ADD CALLISTO TANKMIXES, DACO: 10.2.3.1, pp. 8. |
| PMRA# 1432034 | 2007, TOUCHDOWN TOTAL - TRIAL ABSTRACTS - AND CALLISTO TANKMIXES, DACO: 10.2.3.3(B), pp. 237. |
| PMRA# 1432042 | 2007, TOUCHDOWN TOTAL - SUMMARY OF NON-ADVERSE EFFECTS - ADD CALLISTO TANKMIXES, DACO: 10.3.1, pp. 8. |
| PMRA# 1432043 | 2007, TOUCHDOWN TOTAL - TRIAL ABSTRACTS - ADD CALLISTO TANKMIXES, DACO: 10.3.2(A), pp. 67. |

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