

## Evaluation Report for Category B, Subcategory 3.2, 3.6 Application

**Application Number:** 2016-3361  
**Application:** Changes to the product label: Application timing and pre-harvest interval.  
**Product:** Acuron Herbicide  
**Registration Number:** 31846  
**Active ingredients (a.i.):** S-metolachlor and r-enantiomer  
Atrazine (plus related active triazines)  
Bicyclopyrone  
Mesotrione  
**PMRA Document Number:** 2781673

### Purpose of Application

The purpose of this application was to amend the registration of Acuron Herbicide to extend the application timing on field corn from the 2-leaf stage to the 3 to 6-leaf stage of plant growth, to add a glyphosate tank-mix partner at a rate of 900 g a.i./ha for the post-emergent use; and to reduce the Pre-Harvest Interval (PHI) for corn from 90 days to 60 days.

### Chemistry Assessment

A chemistry assessment was not required for this application.

### Health Assessments

A toxicological assessment was not required for this application.

Occupational exposures to Acuron Herbicide used on post-emergent field corn up to the 6-leaf stage, or in a tank-mix combination with glyphosate on post-emergent glyphosate-tolerant field corn, are not expected to increase relative to the exposures from the registered use of Acuron Herbicide or the tank-mix with glyphosate-containing products. Risks to mixers, loaders, applicators and re-entry workers are not considered to be of concern when label directions and precautions, including personal protective equipment, are followed.

No new residue data for bicyclopyrone, atrazine or mesotrione in hybrid field corn were submitted to support the extension of application timing from the 2-leaf stage to the 6-leaf stage of plant growth, the addition of a glyphosate tank-mix partner for the postemergent use on field corn, and the reduction in the PHI for forage from 90 days to 60 days on the Acuron Herbicide label.

Residue data for s-metolachlor and the safener benoxacor from field trials conducted in the United States were submitted to support the reduction in the PHI for forage. S-metolachlor was applied to field corn at exaggerated rates, and harvested at an earlier PHI than the labeled PHI.

The established MRLs for field corn and livestock commodities are expected to cover residues of s-metolachlor, bicyclopyrone, atrazine and mesotrione resulting from the extension of application timing and the reduction in PHI. Residues in field corn and livestock commodities at the established MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

### **Environmental Assessment**

An environmental risk assessment was not required as the changes to application timing and pre-harvest interval do not affect the application rates or method. Therefore, the environmental exposure and risk associated with these changes are not expected to increase.

### **Value Assessment**

The expansion of the application timing for Acuron Herbicide to include a late post-emergent use in field corn would provide corn growers the flexibility to employ this soil residual herbicide alone or in tank mix with glyphosate herbicide into the late post-emergent application window if a pre- or early post-emergent application cannot be carried out due to poor environmental or field conditions.

Value information demonstrated that field corn at up to and including the 6-leaf stage can be expected to have an adequate margin of crop tolerance to Acuron Herbicide when it is applied in accordance with the label instructions. Value information submitted for review included data from replicated field trials conducted in the northern states of the USA in 2013 and 2014.

The inclusion of the tank mixture with glyphosate herbicide for additional burndown of emerged annual and perennial weeds is also supported since various glyphosate salts are registered for use in glyphosate tolerant corn at up to and including the 6 / 8 leaf stage.

### **Conclusion**

The Pest Management Regulatory Agency has completed an assessment of the information provided for Acuron Herbicide, and has found the information sufficient to support the extension in the application timing on field corn from the 2-leaf stage up to the 6-leaf stage, use of the glyphosate tank-mix partner on postemergent field corn, and the reduction in the PHI for forage from 90 days to 60 days.

## References

### PMRA

#### Document

Number	Reference
2656251	2013, Acuron applied post in corn - Tolerance. TOL-01-13 to TOL-06-13- (HBI008A3-2013US), DACO: 10.3.2.
2656252	2014, Acuron applied post in corn - Tolerance. TOL-01-14 and TOL-02-14 (HBI024B3-2014US), DACO: 10.3.2.
2656363	2012, S-metolachlor + Benoxacor (A9558C) - Magnitude of the Residues in or on Corn Following Applications of S-metolachlor and Benoxacor, USA, 2010 - Final Report, DACO: 7.2.5,7.4.1,7.4.2,7.4.6

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