

## Evaluation Report for Category B, Subcategory 2.1, 2.3, 2.4, 2.6 Application

**Application Number:** 2016-2508  
**Application:** New End-use Product – Chemistry: Guarantee; Identity and Proportion of Formulants; New combination of TGAIs  
**Product:** CHA 5373 Herbicide  
**Registration Number:** 32758  
**Active ingredients (a.i.):** Florasulam and Tribenuron-methyl  
**PMRA Document Number :** 2662565

### Purpose of Application

The purpose of this application was to register a new end-use product, CHA 5373 Herbicide, for pre-plant and early postemergent application to spring wheat, durum wheat, and spring barley and in summer fallow for the control of emerged broadleaf weeds.

### Chemistry Assessment

CHA 5373 Herbicide is formulated as wettable granules containing tribenuron-methyl at a nominal concentration of 30% and florasulam at a nominal concentration of 20%. This end-use product has a bulk density of 0.602-0.618 g/mL and pH of 6.12-6.14. The required chemistry data for CHA 5373 Herbicide have been provided, reviewed and found to be acceptable.

### Health Assessments

In rats, CHA 5373 Herbicide is considered to be of low acute toxicity by the oral, dermal, and inhalation routes of exposure. The formulation is considered to be mildly irritating to the rabbit eye and skin. It is not considered to be a skin sensitizer in mice.

The use of CHA 5373 Herbicide for pre-plant and early postemergent application to spring wheat, durum wheat and spring barley, and in summer fallow for the control of emerged broadleaf weeds is not expected to result in potential occupational or bystander exposure over the registered uses of tribenuron-methyl. Updated quantitative occupational exposure risk estimates were generated for florasulam. No health risks of concern are expected for mixer/loader/applicators and postapplication workers, provided workers follow the label directions and wear the personal protective equipment identified on the label.

No residue chemistry data were submitted for florasulam and tribenuron-methyl to support the registration of CHA 5373 Herbicide. Previously reviewed residue data were considered in the context of the current submission. The currently established MRLs for florasulam and tribenuron-methyl are sufficient to cover residues resulting from the registration of CHA 5373 Herbicide. Previous dietary exposure assessments are considered adequate to cover the residue levels of florasulam and tribenuron-methyl expected from the use of CHA 5373 Herbicide. No health risks of concern have been identified for any segment of the population including infants, children, adults and seniors.

### **Environmental Assessment**

The use of the co-formulation CHA 5373 Herbicide will not result in increased environmental exposure or impact relative to existing registered products. Potential risks to the environment have been mitigated through adequate label statements.

### **Value Assessment**

The co-formulation of the two active ingredients florasulam and tribenuron-methyl into a single product will be easily handled and convenient to apply for the control of a broader spectrum of broadleaf weeds. Both florasulam and tribenuron-methyl are Group 2 mode of action herbicides, but they belong to two chemical families, triazolpyrimidines and sulfonyleureas, respectively.

Value information submitted for review included data from small plot replicated field trials conducted in the Canadian Prairies in 2015. The product performance of CHA 5373 Herbicide, in terms of both efficacy and crop tolerance, was evaluated and compared to that of each component herbicide cited as precedent, applied alone or together in a tank mixture at comparable rates of active ingredient per hectare.

Given that trial data demonstrated that weed control provided by CHA 5373 Herbicide was comparable to that provided by the precedent products, all weed claims labelled for the precedent products are supported for inclusion on the CHA 5373 Herbicide label. Trial data also support the inclusion of control claims for lamb's-quarters and mustards, and a suppression claim for Russian pigweed as well as the tank mixtures with 2,4-D Ester/Amine, MCPA Ester/Amine, Pardner, or glyphosate herbicides.

Given that all host crops listed for CHA 5373 Herbicide, i.e., spring wheat, durum wheat, and spring barley, are registered on the precedent product labels, these crops can be expected to exhibit an adequate margin of crop tolerance to CHA 5373 Herbicide applied in accordance with the label instructions. This was corroborated with the crop tolerance information from the submitted field trials.

The rotational crop claims are supported based on the most restrictive label claim on a precedent product label.

Based on the weight of evidence, the registration of CHA 5373 Herbicide for pre-plant and early postemergent application to spring wheat, durum wheat and spring barley and in summer fallow for the control of emerged broadleaf weeds is considered to have acceptable value.

## Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information sufficient to register CHA 5373 Herbicide.

## References

<b>PMRA Document Number</b>	<b>Reference</b>
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2640579	2015, Analytical Method VAM 239-01: Determination of Tribenuron-Methyl (CAS No. 101200-48-0) and Florasulam (CAS No. 145701-23-1) in Tribenuron-Methyl + Florasulam WG formulations., DACO: 3.4,3.4.1 CBI
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2733892	2016, Determination of the storage stability for 1 year at 20C of tribenuron-methyl 300 g/kg + florasulam 200 g/kg WG formulation in commercial packaging, DACO: 3.5.10,3.5.14
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2657347	2013, Florasulam 200 g/kg + Tribenuron-methyl 600 g/kg WG: Acute Dermal Toxicity Study in Rats. Study No: 35235; DACO 4.6.2.
2657348	2013, Florasulam 200 g/kg + Tribenuron-methyl 600 g/kg WG: Acute Inhalation Toxicity Study in Rats. Study No: 35236; DACO 4.6.3.
2657349	2013, Florasulam 200 g/kg + Tribenuron-methyl 600 g/kg WG: Primary Eye Irritation Study in Rabbits. Study No: 35237; DACO 4.6.4.
2657350	2013, Florasulam 200 g/kg + Tribenuron-methyl 600 g/kg WG: Primary Skin Irritation Study in Rabbits. Study No: 35238; DACO 4.6.5

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2657351	2013, Florasulam 200 g/kg + Tribenuron-methyl 600 g/kg WG: Local Lymph Node Assay (LLNA) in Mice. Study No: 35239; DACO 4.6.6
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