

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

Application Number: 2016-8059
Application: New end use product; changes in product chemistry
Product: Arrow All-In
Registration Number: 33225
Active ingredient (a.i.): Clethodim
PMRA Document Number : 2842767

Purpose of Application

The purpose of this application was to register a new end-use product containing clethodim for post-emergent control of grasses on a variety of crops.

Chemistry Assessment

Arrow All-In is formulated as an emulsifiable concentrate containing clethodim at a concentration of 120 g/L. This end-use product has a density of 0.917 g/mL and pH of 4.57. The required chemistry data for Arrow Arrow All-In have been provided, reviewed and found to be acceptable.

Health Assessments

Arrow All-In is of low acute toxicity in rats by the oral and dermal routes. It is slightly acutely toxic by the inhalation route. It is minimally irritating to the eyes and skin or rabbits. It is not a dermal sensitizer in the guinea pig.

Occupational exposure and food residue assessments were not required for this application.

Environmental Assessment

An environmental assessment was not required for this application.

Value Assessment

There are several herbicides containing clethodim registered in Canada. All these products are registered for application in tank mix with a listed adjuvant. The availability of Arrow All-In would provide growers with a clethodim-containing product that does not have to be applied in tank mix with an adjuvant.

Value information, which included data from field trials conducted in the Canadian Prairies in 2017, demonstrated that the performance of Arrow All-In was agronomically similar to the cited precedent treatment in terms of efficacy and crop tolerance . Arrow All-In can be expected to provide acceptable control of labelled weeds and have an adequate margin of

crop tolerance for use in labelled crops.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information sufficient to register Arrow All-In.

References

PMRA

Document

Number	Reference
2710722	2016, Chemistry-clethodim 120, DACO: 3.1.1,3.1.2,3.1.3,3.1.4,3.2.1,3.5.13,3.5.15,3.5.4,3.5.5
2710723	2016, Chemistry-3.2.2-Clethodim 120 EC arrow Formulation process 1.11.16, DACO: 3.2.2 CBI
2710724	2006, Clethodim 120 EC: Physical and Chemical Characteristics, DACO: 3.5.1,3.5.11,3.5.14,3.5.2,3.5.3,3.5.6,3.5.7,3.5.8,3.5.9
2710726	2004, Acute Toxicity of Clethodim 120 EC by Oral Administration in Rats, DACO: 4.6.1
2710727	2004, Acute Toxicity of Clethodim 120 EC in Rats by Dermal Administration Limit Test, DACO: 4.6.2
2710728	2004, Acute Inhalation Toxicity of Clethodim 120 EC in Rats, DACO: 4.6.3
2710729	2004, Acute Eye Irritation Study of Clethodim 120 EC by Instillation into the Conjunctival Sac of Rabbits, DACO: 4.6.4
2710730	2004, Acute Skin Irritation Test (Patch Test) of Clethodim 120 EC in Rabbits, DACO: 4.6.5
2710731	2004, Examination of Clethodim 120 EC in a Skin Sensitization Test in Guinea Pigs (Maximization Test), DACO: 4.6.6
2816217	2017, Evaluate Arrow All-In with adjuvants for efficacy and crop tolerance in peas, DACO: 10.2.3.3(B) and 10.3.2.
2816218	2017, Arrow All-In mixes, DACO: 10.2.3.3(B) and 10.3.2.
2816219	2017, Arrow All-In mixes, DACO: 10.2.3.3(B) and 10.3.2.
2816220	2017, Arrow All-In mixes, DACO: 10.2.3.3(B) and 10.3.2.

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