

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

Application Number: 2019-0934
Application: New End-Use Product (EP) - Product Chemistry:
Guarantee, Identity of Formulants, Proportion of Formulants
Product: Destinaire High Surfactant Oil Concentrate
Registration Number: 33770
Active ingredient (a.i.): Methylated seed oil of soybean
PMRA Document Number: 3099540

Purpose of Application

The purpose of the application was to register the new adjuvant product Destinaire High Surfactant Oil Concentrate, for use with Arrow 240 EC Herbicide (Reg. No. 28224; a.i. clethodim), Assure II Herbicide (Reg. No. 25462; a.i. quizalofop-p-ethyl), Antler 240 EC (Reg. No. 32880; a.i. clethodim), Clethodim 240 (Reg. No. 32334; a.i. clethodim), Adama Ladder 240 EC (Reg. No. 29495; a.i. clodinafop-propargyl), Centurion Emulsifiable Concentrate Post-Emergence Herbicide (Reg. No. 27598; a.i. clethodim) and Select Emulsifiable Concentrate Postemergence Herbicide (Reg. No. 22625; a.i. clethodim).

Chemistry Assessment

Destinaire High Surfactant Oil Concentrate is formulated as a solution containing methylated seed oil of soybean at a concentration of 50.00%. This adjuvant has a specific gravity of 1.01 and a pH of 6.18. The required chemistry data for Destinaire High Surfactant Oil Concentrate have been provided, reviewed and found to be acceptable.

Health Assessments

Destinaire High Surfactant Oil Concentrate is of low acute toxicity via the oral, dermal and inhalation routes of exposure in rats. It is minimally irritating to the eyes skin in rabbits. Destinaire High Surfactant Oil Concentrate tested negative for dermal sensitization in a modified Buehler test in guinea pigs.

No new residue data were submitted to support the use of Destinaire High Surfactant Oil Concentrate as tank-mix partner with registered herbicide products. The use rate of Destinaire High Surfactant Oil Concentrate adjuvant does not exceed the registered use rate of crop oil concentrates currently listed on indicated herbicide product labels. When used together with registered herbicide EPs containing the active ingredients clethodim, clodinafop-propargyl or quizalofop-p-ethyl, no change in the magnitude of the active ingredient residues is expected in treated food crops.

Therefore, dietary exposure to clethodim, clodinafop-propargyl or quizalofop-p-ethyl is not expected to increase, and will not pose an unacceptable risk to any segment of the populations, including infants, children, adults and seniors.

The use of Destinaire High Surfactant Oil Concentrate as an adjuvant is not expected to result in potential occupational or bystander exposure over the registered use of methylated seed oil of soybean. No risks of concern are expected when workers follow label directions and wear personal protective equipment as stated on the label.

Environmental Assessment

The use pattern for Destinaire High Surfactant Oil Concentrate is within those registered for the active ingredient. No additional risk to the environment is expected from the registration of this product.

Value Assessment

The registration of Destinaire High Surfactant Oil Concentrate would provide farmers with an additional adjuvant choice on the marketplace for use with a variety of herbicides.

Value information summarized and submitted included data from field trials, which were conducted on soybeans, lentils, canola, and field peas. The trials were conducted in Minnesota, Saskatchewan, Ontario, Manitoba, and North Dakota in 2017 and 2018. The efficacy and crop tolerance of Assure II Herbicide, Clethodim 240, and Arrow 240 EC Herbicide applied with labelled adjuvants to treatments applied with Destinaire High Surfactant Oil Concentrate was assessed in these trials. The results indicated performance was comparable between these herbicide treatments applied with their respective label adjuvants (e.g., Surf_Act, Adama X-Act or Sure Mix) and Destinaire High Surfactant Oil Concentrate. Therefore, the herbicides containing clethodim and quizalofop-p-ethyl, i.e., Arrow 240 EC Herbicide, Assure II Herbicide, Antler 240 EC, Clethodim 240, Centurion Emulsifiable Concentrate Post-Emergence Herbicide and Select Emulsifiable Concentrate Postemergence Herbicide are supported for inclusion on the Destinaire High Surfactant Oil Concentrate label.

Although field trials were not conducted using clodinafop-propargyl, a rationale was provided that quizalofop-p-ethyl is of the same chemical family and mode of action and that performance of herbicides containing clodinafop-propargyl in tank mix with Destinaire High Surfactant Oil Concentrate can be expected to be similar to those containing quizalofop-p-ethyl. The rationale is considered acceptable and Adama Ladder 240 EC, therefore, is supported for inclusion on the Destinaire High Surfactant Oil Concentrate label.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information sufficient to support the registration of Destinaire High Surfactant Oil Concentrate.

References

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2969476	2018, To determine the influence of Destiny HC surfactant on the performance of clethodim herbicide for grassy weed control, DACO: 10.2.3.3, 10.3.2
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