

Evaluation Report for Category B, Subcategory 2.6, 3.10, 3.11, 3.12, 3.13 Application

Application Number: 2021-2097
Application: New End-use Product (Product Chemistry) – New Combination of Technical Grade Active Ingredients;
New Product Labels – Tank Mixes, New Pests, New Site or Host, Precautions
Product: Select Plus
Registration Number: 34744
Active ingredients (a.i.): Clethodim and Quizalofop-P-ethyl
PMRA Document Number: 3428975

Purpose of Application

The purpose of this application was to register Select Plus, an end-use product for post-emergent weed control in listed terrestrial food and feed crops.

Chemistry Assessment

Select Plus is formulated as an emulsifiable concentrate containing clethodim and quizalofop-P-ethyl at concentrations of 240 g/L and 120 g/L, respectively. This end-use product has a density of 0.999 g/mL and pH of 4.28. The required chemistry data for Select Plus have been provided, reviewed and found to be acceptable.

Health Assessments

Select Plus is of low acute toxicity by the oral, dermal, and inhalation routes. It is moderately irritating to the eye and non-irritating to the skin. It is not a skin sensitizer.

The uses of Select Plus on labelled crops is not expected to result in potential occupational or bystander exposure over the registered use of clethodim or quizalofop-P-ethyl. No health risks of concern are expected when workers follow label directions and wear personal protective equipment as stated on the label.

No new residue data for clethodim or quizalofop-P-ethyl in *Brassica carinata*, *Brassica juncea* (Oriental / Brown mustard [condiment and oilseed types]), canola, flax (including low linoleic acid varieties), dry pea, edamame and edible-podded legume vegetables (crop subgroup 6A), succulent shelled pea and bean (crop subgroup 6B), dried shelled pea and bean (crop subgroup 6C; except dry pea and soybean), seed alfalfa, soybean, and yellow mustard were submitted or required to support the registration of these active ingredients on the Select Plus label. Previously

reviewed residue data from field trials conducted in/on the crops listed above were reassessed in the framework of this application. In addition, processing studies in treated canola and soybeans were also reassessed to determine the potential for concentration of residues of clethodim and quizalofop-P-ethyl into processed commodities.

The anticipated residues in the above-mentioned crops and animal commodities from the labelled use will be covered by the established maximum residue limits (MRLs) for each of the active ingredients and will not pose health risks of concern to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

The use of Select Plus for the control of annual and perennial grass weeds in *Brassica carinata*, *Brassica juncea* (Oriental / Brown), canola, flax, dry pea, edamame and edible-podded legume vegetables (crop subgroup 6A), succulent shelled pea and bean (crop subgroup 6B), dried shelled pea and bean (crop subgroup 6C; except dry pea and soybean), seed alfalfa, soybean, and yellow mustard is not expected to result in risks to the environment when used as directed on the label.

Value Assessment

The availability of Select Plus provides farmers across Canada with an option to use a product containing two Weed Science Society of America Group 1 active ingredients to effectively manage a broad spectrum of grassy weeds in a number of broadleaf crops. With the use of tank mixtures, growers are able to control more weeds with one pass of the sprayer.

Value information in the form of data from small-scale field trials conducted in Canada and the European Union, scientific rationales, and precedent registrations demonstrated that the registration of Select Plus for post-emergent control of a broad spectrum of grassy weeds in *Brassica carinata*, *Brassica juncea*, canola, flax, dry pea, edamame and edible-podded legume vegetables (crop subgroup 6A), succulent shelled pea and bean (crop subgroup 6B), dried shelled pea and bean (crop subgroup 6C; except dry pea and soybean), seed alfalfa, soybean, and yellow mustard has acceptable value.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information acceptable to support the registration of Select Plus.

References

PMRA Document Number	Reference
3230918	2020, H1331aa Product Identity and Composition, Description of Materials Used to Produce the Product, Description of Formulation Process, Discussion of Formation of Impurities, and Certified Limits, DACO: 3.0,3.1,3.2,3.2.1,3.2.2,3.2.3,3.4.2 CBI
3230922	2020, H1331aa: Physical Properties, DACO: 3.5.1,3.5.11,3.5.12,3.5.13,3.5.15,3.5.2,3.5.3,3.5.6,3.5.7,3.5.8,3.5.9 CBI
3230924	2020, H1331aa: Storage Stability and Corrosion Characteristics, DACO: 3.5.10,3.5.14 CBI
3240017	2021, H1331aa Herbicide Product Identity and Composition, Description of the Materials Used and Formulation Process, Discussion of the Formation of Impurities, Certified Limits, and Enforcement Analytical Method, DACO: 3.0,3.1,3.2,3.3.1,3.4 CBI
3310722	2020, Additional Product Chemistry for H1331aa Herbicide, updated, DACO: 3.1.1,3.1.2,3.1.4,3.5.4,3.5.5 CBI
3310723	2022, Determination of Isomeric Ratio of R-Quizalofop-Ethyl and S-Quizalofop-Ethyl in Clethodim 240 + Quizalofop-P-Ethyl 120 g/L EC, DACO: 3.4.1 CBI
3310724	2022, Validation of Analytical Method for Determination of Active Ingredient Content of Clethodim 240 + Quizalofop-P-Ethyl 120 g/L EC, DACO: 3.4.1 CBI
3310727	2022, Specific Gravity of Clethodim 240 + Quizalofop-P-Ethyl 120 g/L EC Data DACO: 3.5.6 CBI
3310728	2022, Accelerated Storage Stability and Corrosion Characteristics of Clethodim 240 + Quizalofop-P-Ethyl 120 g/L EC, DACO: 3.5.10 CBI
3230925	2014, Acute Oral Toxicity in Rats (<i>Rattus norvegicus</i>) With the Test Substance BR-ARY-10-13 F01 (Clethodim 240 + Quizalofop-P-Ethyl 120 EC), DACO: 4.6.1
3230926	2014, Acute Dermal Toxicity in Rats (<i>Rattus norvegicus</i>) With the Test Substance BR-ARY-10-13 F01 (Clethodim 240 + Quizalofop-P-Ethyl 120 EC), DACO: 4.6.2
3230928	2014, Acute Inhalation Toxicity Test with BR-ARY-10-13 F01 (Clethodim 240 + Quizalofop-P-Ethyl 120 EC) in Rats (<i>Rattus norvegicus</i>), DACO: 4.6.3
3230930	2014, Acute Eye Irritation/Corrosion Study in Rabbits (<i>Oryctolagus cuniculus</i>) With the Test Substance BR-ARY-10-13 F01 (Clethodim 240 + Quizalofop-P-Ethyl 120 EC), DACO: 4.6.4

PMRA Document Number	Reference
3230931	2014, Acute Dermal Irritation/Corrosion in Rabbits (<i>Oryctolagus cuniculus</i>) With the Test Substance BR-ARY-10-13 F01 (Clethodim 240 + Quizalofop-P-Ethyl 120 EC), DACO: 4.6.5
3230932	2014, Skin Sensitization in Guinea Pigs (<i>Cavia porcellus</i>) With the Test Substance BR-ARY-10-13 F01 (Clethodim 240 + Quizalofop-P-Ethyl 120 EC) (Buehler Test Method), DACO: 4.6.6
3230914	2020, Value Summary for H1331aa Herbicide for Grass Weed Control in Broadleaf Crops, DACO: 10.1, 10.2.2, 10.2.3.1, 10.3.2, 10.4, 10.5.1, 10.5.2, 10.5.3, 10.5.4, 10.5.5
3230915	2020, EU Trials for H1331aa Herbicide, DACO: 10.2.3.3(B)
3230916	2020, Canada Trials for H1331aa Herbicide, DACO: 10.2.3.3(B)

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