

Evaluation Report for Category B, Subcategory 2.3, 2.4, 2.5, 2.6 Application

Application Number: 2014-5349
Application: New EP Product Chemistry-Identity of Formulants, Proportion of Formulants, Formulation Type, New combination of TGIAs
Product: DPX-R7U12 Herbicide
Registration Number: 32143
Active ingredients (a.i.): Fluroxypyr (present as 1-methylheptyl ester) and thifensulfuron-methyl
PMRA Document Number: 2574168

Purpose of Application

The purpose of this application was to register a new commercial EP, DPX-R7U12 Herbicide, an oil dispersion (OD) herbicide formulation based on precedent products for early season use on spring wheat (including durum), winter wheat, oats and spring barley. DPX-R7U12 Herbicide is a 180 g/L OD formulation which contains 30 g thifensulfuron methyl and 150 g (ae, acid equivalents) fluroxypyr/L. This formulation is to be applied post-emergent to the crop by ground or aerial application at a maximum rate of 0.5 L formulated product/ha to deliver 15 g (ai) thifensulfuron methyl/ha and 75 g (ae) fluroxypyr/ha to control broadleaf weeds. Both active ingredients are currently separately registered for early season use on the requested cereal crops.

Chemistry Assessment

DPX-R7U12 Herbicide is formulated as a suspension containing fluroxypyr (present as 1-methylheptyl ester) at 150 g/L and thifensulfuron-methyl at 30 g/L. This end-use product has a density of 0.89 -1.09 g/mL and a pH of 4.0 – 5.0. The chemistry requirements for this product have been fulfilled.

Health Assessments

DPX-R7U12 Herbicide is of low acute toxicity via the oral, dermal and inhalation routes of exposure. It is minimally irritating to the eye and slightly irritating to the skin of rabbits. DPX-R7U12 Herbicide is a skin sensitizer in mice.

No new residue data were submitted to support the registration of the new end-use product DPX-R7U12 Herbicide, containing thifensulfuron-methyl and fluroxypyr-meptyl. A scientific rationale to waive the need for additional residue data was submitted, reviewed and found acceptable. As all active ingredients are currently registered for use on wheat (spring, durum and winter), spring barley, and oats at similar application rates and conditions, the registration of DPX-R7U12 Herbicide will not result in an increase in dietary exposure to these active ingredients and will not pose risks of concern to any segment of the population, including infants, children, adults and seniors.

The use of the new end-use product DPX-R7U12 Herbicide on wheat, barley and oats is not expected to result in potential occupational or bystander exposure over the registered use of thifensulfuron-methyl and fluroxypyr. No health risks of concern are expected when workers follow label directions and wear the personal protective equipment as stated on the label.

Environmental Assessment

The formulation DPX-R7U12 Herbicide may pose a risk to aquatic organisms and non-target terrestrial plants. Spray buffer zones were determined for DPX-R7U12 Herbicide based on the most recent risk assessment and buffer zone calculation models used for each of the active ingredients in the formulation. Environmental concerns have been mitigated with spray buffer zones and adequate statements on the product label.

Value Assessment

DPX-R7U12 Herbicide will provide a convenient liquid formulation of two well-known active ingredients for use in small grain cereals. The information provided for review including small scale field trial data and scientific rationale, as well as precedent products, support the value of DPX-R7U12 Herbicide.

Conclusion

PMRA has reviewed information provided in support of the registration of DPX-R7U12 Herbicide. Based on this review, DPX-R7U12 Herbicide is acceptable for registration.

References

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