

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

Application Number: 2010-0773
Application: New end-use product chemistry: formulation type, identity and proportion of formulants.
Product: Sinbar Herbicide WDG
Registration Number: 30082
Active ingredients (a.i.): Terbacil
PMRA Document Number English PDF: 2046669

Background

Sinbar Herbicide Wettable Powder (Registration number 10628), containing 80% terbacil, has been registered since July 1, 1970. It is registered for use at multiple rates without an adjuvant and in several crops, including in orchards of apple or peach, strawberries, highbush blueberries, lowbush blueberries; asparagus, fruit trees, spearmint and peppermint crops and raspberries for the control of labeled annual grassy and broadleaved weeds and for the suppression of quackgrass, horsenettle and yellow nutsedge. It is also registered for pre-emergence application in a tank mixture with Lexone DF Herbicide Dispersible Granules (Registration number 15959; guarantee 75% metribuzin) or Lexone DF Toss-N-Go Herbicide Dispersible Granules (Registration number 21077; guarantee 75% metribuzin) in established fruit trees for broad spectrum weed control. For specific details of uses, application rates and methods, precautions, restrictions, and personal protective equipment requirements, refer to the product label.

Purpose of Application

The purpose of this application was to register a new end-use product Sinbar Herbicide WDG to replace the precedent product, Sinbar Herbicide Wettable Powder, containing the same active ingredient at the same guarantee (80% terbacil), with changes in the formulation type and formulants. The proposed use pattern and application rates for Sinbar Herbicide WDG are identical to the currently registered product. In addition, use in established and new plantings of Short-Rotation-Intensive-Culture (SRIC) poplar and willow crops for broad spectrum weed control was also proposed.

Chemistry Assessment

Sinbar Herbicide WDG is formulated as wettable granules containing terbacil at a nominal concentration of 80.0%. This end-use product has a density of 0.56 g/mL and a pH of 8.64. The chemistry requirements for Sinbar Herbicide WDG are complete.

Health Assessments

The toxicological profile of Sinbar Herbicide WDG is expected to be similar to that of the active ingredient, terbacil. Terbacil was of moderate acute oral toxicity to rats, but of low acute dermal and inhalation toxicity. Terbacil was minimally irritating to the eyes of rabbits and was not found to be a dermal sensitizer in guinea pigs.

No new residue data were submitted to support the new end-use product Sinbar Herbicide WDG. Since the new and precedent end-use products are soil applied herbicides and there is no change to the application rates or timing, the new formulation is not anticipated to have an impact on the magnitude of the residues in the registered crops. Therefore, the dietary exposure is not expected to increase and will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

The use of the new end use product Sinbar Herbicide WDG should not result in potential occupational or bystander exposure over the registered uses of terbacil. No unacceptable risk is expected when workers follow label directions and wear personal protective equipment as stated on the label.

Environmental Assessment

An environmental assessment of Sinbar Herbicide WDG was not required since the uses and application rates of the active ingredient terbacil have not changed. Environmental concerns have been mitigated through existing environmental statements on the product label.

Value Assessment

Data from five field trials conducted in 2009 in Washington State support the claim that Sinbar Herbicide WDG is agronomically equivalent to Sinbar Herbicide Wettable Powder from an efficacy standpoint (four trials) and from a host crop tolerance standpoint (2 trials). In two additional field trials, also conducted in 2009 in Washington State, peppermint was demonstrated to be tolerant of Sinbar Herbicide WDG and Sinbar Herbicide Wettable Powder, both applied with an adjuvant, at application rates near or above the rate that is labelled for use on that crop.

No data were submitted from treatments of Sinbar Herbicide WDG plus Lexone DF Herbicide Dispersible Granules or Lexone DF Toss-N-Go Herbicide Dispersible Granules in established fruit tree orchards. However, given that a tank mix of Sinbar Herbicide Wettable Powder plus Lexone DF Herbicide Dispersible Granules or Lexone DF Toss-N-Go Herbicide Dispersible Granules is registered for use in established fruit tree orchards at the same application rate, that it is applied as a pre-emergent treatment, and that the tank mix is applied as a band under the trees, differences in performance are not expected either from an efficacy or tree tolerance standpoint.

The requested use on poplar and willow in established and new plantings of Short-Rotation-Intensive-Culture (SRIC) is not supported since the precedent product is not registered for use on these crops and no data were submitted from studies in which the tolerance of these crops to Sinbar Herbicide WDG was evaluated.

Conclusion

The PMRA has completed an assessment of available information for Sinbar Herbicide WDG and has found the information sufficient to support the full registration of Sinbar Herbicide WDG including all uses registered for the precedent product, Sinbar Herbicide Wettable Powder.

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