

Evaluation Report for Category B, Subcategory 2.6 Application

Application Number:	2008-5898
Application:	B.2.6 [New/Changes Master Product Chemistry – New
	combination of TGAIs]
Product:	Takkle Herbicide
Registration Number:	29552
Active ingredients (a.i.):	Glyphosate, present as isopropylamine salt (GPI) and Dicamba, present as isopropylamine salt (DIC)
PMRA Document Number : 1850409	

Purpose of Application

The purpose of this application was to register the end-use product, Takkle Herbicide, containing 140 g acid equivalent (a.i.)/L glyphosate (present as isopropylamine salt) plus 70 g a.i./L dicamba (present as isopropylamine salt). Takkle Herbicide is a water soluble herbicide for use in reduced tillage systems prior to seeding of cereal crops, such as wheat, barley, rye, oats and field corn only and summerfallow land for the control or suppression of emerged weeds. This product is not to be applied to sweet corn prior to seeding.

Chemistry Assessment

Takkle Herbicide is a solution containing the active ingredient glyphosate at a nominal concentration of 140 g/L and the active ingredient dicamba at a nominal concentration of 70 g/L. This product has a density of 1.12 g/cm^3 and pH of 5.5 for a 1 % solution in water. The chemistry requirements for Takkle Herbicide have been completed.

Health Assessments

No new residue data were submitted to support the registration of the new end-use product Takkle Herbicide, for summerfallow and pre-seed uses. The application rates for each active ingredient in the coformulation are within the currently registered label rates for other products. All other aspects of the use pattern remain the same. The disposition, translocation and magnitude of the residues of each active ingredient are not expected to be affected when they are coformulated together. Therefore, the dietary risk is not expected to increase and Takkle Herbicide should not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.



Takkle Herbicide is of low toxicity to rats via the oral ($LD_{50} >5000 \text{ mg/kg}$), dermal ($LD_{50} >50 \text{ sommal}/\text{LD}_{50} >50 \text{ mg/kg}$), and inhalation routes ($LC_{50} >2.60 \text{ mg/L}$). It is moderately irritating to the eye of rabbits. The test substance is neither a skin irritant in rabbits nor a dermal sensitizer in guinea pigs.

Since the use of Takkle Herbicide on summerfallow and as a pre-seed application fits within the existing use pattern for glyphosate and dicamba, exposure to workers mixing, loading and applying the product, or entering treated areas is not expected to increase over the currently registered use pattern.

Environmental Assessment

No additional environmental data were required to support the registration of Takkle Herbicide. Environmental exposure resulting from the use of this product is expected to be similar to that of other registered glyphosate and dicamba products. Environmental concerns such as the leaching potential of dicamba, and risks to aquatic organisms and non-target terrestrial plants resulting from the use of Takkle Herbicide have been mitigated through adequate statements and buffer zones on the product label.

Value Assessment

Bridging data from 4 small-plot field trials conducted over 1 year (2007) in reduced tillage systems were submitted to support the efficacy claims of Takkle Herbicide. Each trial included a treatment of Takkle Herbicide with/without 2,4-D ester and the precedent registered product, Rustler Herbicide (Reg. No. 27200), containing the same active ingredients. The control ratings for 11 weed species listed on both product labels were assessed. Based on the information made available, it was determined that the performance of Takkle Herbicide was similar to that of the precedent product, Rustler Herbicide.

Crop tolerance data were not required as Takkle Herbicide is not for use on actively growing crops and the active ingredients (glyphosate and dicamba) do not persist in the soil.

Conclusion

The PMRA has completed an evaluation of the subject application and has found the information sufficient to register Takkle Herbicide for use in reduced tillage systems prior to seeding of cereal crops such as wheat, barley, rye, oats and field corn only and summerfallow land for the control or suppression of emerged weeds.

References

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