

Evaluation Report for Category B, Subcategory 3.14 Application

Application Number: 2014-0552

Application: New Product Labels-Classifications **Product:** Opportune Home and Garden

Registration Number: 31505

Active ingredients (a.i.): Streptomyces acidiscabies strain RL-110^T and Thaxtomin A

PMRA Document Number: 2450278

Purpose of Application

The purpose of this application was to register a new domestic end-use product, Opportune Home and Garden (guarantee: 17% w/w of *Streptomyces acidiscabies* strain RL-110^T and 7.8 g/L thaxtomin A), for the post-emergence control of dandelions in turfgrass (fescue spp. and Kentucky bluegrass) grown across Canada.

The registration of Opportune Home and Garden is based on the precedent registration of Opportune PTO (Registration Number 31166; formerly called MBI-005 EP Herbicide).

Chemistry Assessment

The existing data set was sufficient for the registration of Opportune Home and Garden.

Health Assessments

Based on previously submitted information and data submitted in support of MBI-005 TGAI (Registration Number 31165) and Opportune PTO, killed, non-viable *Streptomyces acidiscabies* strain RL-110^T cells and spent fermentation media, containing 7.8 g/L thaxtomin A is not toxic to mammals via the oral, pulmonary, or dermal route and is slightly irritating to the skin and minimally irritating to the eye. No skin or eye hazard statements are required on the label.

Although dermal toxicity or toxicity from inhalation exposure is considered minimal from the end-use product use pattern, the PMRA assumes that all microorganisms contain substances that can elicit positive hypersensitivity reactions, regardless of the outcome of sensitization testing. Therefore, domestic users are directed to avoid contact with skin, eyes, or clothing; to avoid breathing mist; to wash thoroughly with soap and water after handling; and to remove contaminated clothing and wash before reuse.

Overall, the PMRA does not expect that bystander exposures will pose an undue risk on the basis of the low toxicity/pathogenicity profile for the microbial pest control agent and the assumption that precautionary label statements will be followed by domestic applicators in the use of Opportune Home and Garden.



The label allows applications to residential lawns. Therefore, there is a potential for non-occupational exposure to adults, infants and children. Overall, however, the PMRA does not expect that bystander exposures will pose an undue risk on the basis of the low toxicity/pathogenicity profile for the active ingredient in Opportune Home and Garden. Since the PMRA assumes that all microorganisms contain substances that can elicit positive hypersensitivity reactions, the Opportune Home and Garden label must include the statement "DO NOT re-enter or allow entry into treated areas until the spray is dried" in order to minimize exposure.

The label precautions adequately mitigate the risks from occupational and bystander exposure to Opportune Home and Garden. No other human health studies are required to consider a decision on the registration of Opportune Home and Garden for domestic use against dandelions in turf.

Environmental Assessment

Based on previously submitted information and data submitted in support of MBI-005 TGAI and Opportune PTO, there is reasonable certainty that no harm will be caused to birds, wild mammals, fish, arthropods, non-arthropod invertebrates, and microorganisms from the use of Opportune Home and Garden. The use of thaxtomin A in Opportune Home and Garden could, however, harm non-target plants, but these effects should be minimal based on the proposed use pattern of this end use product, i.e., spot treatments on turf.

No other environmental fate studies or non-target organism studies are required to support the domestic use of Opportune Home and Garden to control dandelions in turf.

Value Assessment

Value information submitted in support of the registration of Opportune PTO under application number 2010-5249 was applicable for supporting the registration of Opportune Home and Garden. Data from six trials conducted in the USA in 2010 and 2011 demonstrated that a 5 x and 10 x dilution of Opportune PTO can have activity against dandelion in turf when applied as a spot treatment.

There are a number of conventional herbicides currently registered in Canada for the control of dandelion in turfgrass. However, there are fewer herbicides available to users in certain provinces and jurisdictions that have enacted legislation restricting pesticide availability for non-essential or cosmetic use. Opportune Home and Garden is classed as a biological herbicide. The registration of Opportune Home and Garden will provide home owners an alternative to manage dandelion infestations in turfgass in these regions.

Conclusion

The PMRA has completed a review of the information available for Opportune Home and Garden and has found the information sufficient to support registration.

References

PMRA	
Document	
Number	Reference
1975374	2010, Broadleaf Weed Control Marrone Bio And Solitare, DACO:
	M10.2.2,M10.3.1
2120017	2011, Comparison of MBI-005 concentrations and spray volumes for
	postemergence control of common landscape weeds grown in containers,
	DACO: 10.2.3.3(B), 10.3.2(A), M10.0
2120018	2011, Evaluation of MBI-005 Concentrations for Post-emergence Control of
	Dandelion in Turf, DACO: 10.2.3.3(B),10.3.2(A),M10.0
2120021	2011, Evaluation of MBI-005 Concentrations for Post-emergence Control of
	Broadleaf Weeds in Turf, DACO: 10.2.3.3(B),10.3.2(A),M10.0
2120022	2011, Evaluation of MBI-005 Concentrations for Crop Safety on Cool-season
	Turf Species, DACO: 10.2.3.3(B),10.3.2(A),M10.0
2120023	2010, MBI-005 in Turf, DACO: 10.2.3.3(B),10.3.2(A),M10.0
2403278	2014, Use Description/Scenario for Opportune Home and Garden (Submitted
	In Support Of DACO 5.2). DACO: 5.2

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