

Evaluation Report for Category B, Subcategory 3.11, 3.4 Application

Application Number: 2014-5638
Application: New or Changes to Product Labels – New Pests
New or Changes to Product Labels – Application Method
Product: Chontrol Peat Paste
Registration Number: 29293
Active ingredients (a.i.): *Chondrostereum purpureum* strain PFC2139
PMRA Document Number : 2526676

Purpose of Application

The purpose of this application was to add a new method of application (i.e., back pack sprayer) and new weed species (i.e., red oak (*Quercus rubra*), trembling aspen (*Populus tremuloides*), ironwood (*Ostrya virginiana*), thin leaf alder (*Alnus viridis* ssp. *crispa*), sugar maple (*Acer saccharum*), white birch (*Betula papyrifera*), and choke cherry (*Prunus virginiana*)) to the product label. The applicant also requested an expansion to the upper limit of the container size range from 1.2 kg to 11 kg.

Chemistry Assessment

No new information was submitted for review. Since no changes were made to the formulation and no change in manufacturing has occurred, the existing product characterization database for Chontrol Peat Paste was deemed adequate to assess its potential human health and environmental risks. No additional studies are required to support the proposed amendments to the registration of Chontrol Peat Paste.

Health Assessments

No new toxicological studies were submitted for review since the technical grade active ingredient and end-use product (EP) were not amended in any way for the current application. Based on previous reviews, *C. purpureum* strain PFC2139 is not toxic or pathogenic to rats and rabbits via the oral, pulmonary and dermal routes of exposure. The EP is slightly irritating when applied dermally and is minimally irritating when instilled into the eye. Furthermore, *C. purpureum* is not known to produce mammalian toxins.

When handled according to the label instructions, the potential for dermal, and eye exposure for applicators, mixer/loaders, and handlers exists, with primary exposure route being dermal. Since unbroken skin is a natural barrier to microbial invasion of the human body, dermal absorption could occur only if the skin were cut, if the microbe were a pathogen equipped with mechanisms for entry through or infection of the skin, or if metabolites were produced that could be dermally absorbed. *Chondrostereum purpureum* strain PFC2139 is not identified as a dermal wound pathogen and does not contain any known toxic secondary metabolites. There is no indication that it could penetrate intact skin of healthy individuals. Furthermore, no

significant toxicity and infectivity hazards were noted in toxicological testing.

Although toxicity is considered minimal from the proposed EP use, the Pest Management Regulatory Agency (PMRA) assumes that all microorganisms contain substances that can elicit positive hypersensitivity reactions, regardless of the outcome of sensitization testing. Therefore, anyone handling or applying Chontrol Peat Paste must wear waterproof gloves, long-sleeved shirts, long pants and shoes plus socks.

Similarly, the potential for residential bystander exposure is negligible during application, though it increases significantly after fungal growth has occurred on treated stumps. The potential for bystander exposure following fungal growth is possible via inhalation of the released spores. Overall, the PMRA does not expect that residential and bystander exposures will pose an undue risk on the basis of the low toxicity/pathogenicity profile for *C. purpureum* strain PFC2139 and Chontrol Peat Paste, and the assumption that precautionary label statements will be followed by commercial applicators in the use of Chontrol Peat Paste. As well, the active ingredient, *C. purpureum* strain PFC2139, belongs to a species that is abundant in the environment and the use of Chontrol Peat Paste is not expected to increase exposure to bystanders beyond natural levels. Consequently, the health risk to infants and children is expected to be negligible.

Label warnings, restrictions and risk mitigation measures are adequate to protect users of Chontrol Peat Paste, and no significant occupational risks are anticipated for this product. No additional studies are required to support the proposed amendments to the registration of Chontrol Peat Paste.

Environmental Assessment

No new information was submitted in support of the amendments to the registration of Chontrol Peat Paste. The changes in the uses of Chontrol Peat Paste are consistent with existing registered uses for this microbial pest control agent. The treatment of additional weed species and new application method, i.e., backpack sprayer, are not expected to significantly increase environmental risk to non-target organisms if the directions for use on the label are followed. No additional studies are required to support the proposed amendments to the registration of Chontrol Peat Paste.

Value Assessment

There is a clear trend towards reduced chemical herbicide use in vegetation management across Canada due to legislation in various provinces and municipalities and societal pressures. The use of conventional chemical herbicides is not permitted on some sites which require hardwood vegetation control, e.g., riparian areas, community watersheds, municipalities with legislation that limits pesticide use, and private lands with unique restrictions on pesticide use or agreements in place. The availability of Chontrol Peat Paste for hardwood vegetation management provides an alternative option on these sites.

Forest tree species typically occur in mixed stands, limited pest claims, red and Sitka alder only, on the Chontrol Peat Paste label may be a major obstacle to product adoption by end-users. Vegetation managers are reluctant to use the product if it cannot be applied to all tree species

present on a management field site. This situation requires more than one treatment option to be used for vegetation control, which would immediately increase operational costs for both materials and labour. The inclusion of these pest claims gives Chontrol Peat Paste a wider use pattern and more flexibility.

Information provided by the registrant indicated that the application of Chontrol Peat Paste inhibited resprouting and regrowth from cut stumps of trembling aspen, red oak, ironwood, sugar maple, choke cherry, thin leaf alder, and white birch. Value information submitted included data from three field trials conducted in Ontario and British Columbia, published scientific papers, and a scientific rationale.

Based on the weight of evidence, the inclusion of the pest claims, including red oak, trembling aspen, ironwood, sugar maple, choke cherry, thin leaf alder, and white birch, on the Chontrol Peat Paste label has value and is supported.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the available information and is able to support the addition of a new method of application, the addition of new weed species and an expansion in the upper limit of the container size range for Chontrol Peat Paste.

References

PMRA Document Number	References
2479073	2014, M5.0 EXPOSURE ASSESSMENT, DACO: M5.0
2479074	2014, M10 value (including efficacy), DACO: M10.0, M10.1, M10.2, M10.2.1, M10.2.2, M10.3, M10.3.1, M10.3.2, M10.3.2.1, M10.3.2.2, M10.4, M10.4.1, M10.4.2, M10.4.3, M10.4.4, and M10.5.
2479077	2010, Integrated vegetation management plan for transmission rights-of-way. #105-977-2010-2015, DACO: M10.2.

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