

Evaluation Report for Category B, Subcategory 2.1, 3.1 Application

Application Number: 2017-1754
Application: New end use product; new guarantee and application rate
Product: Richgrow Moss Control Broadcast Grade
Registration Number: 33026
Active ingredients (a.i.): Iron (present as ferrous sulfate monohydrate)
PMRA Document Number : 2854061

Purpose of Application

The purpose of this application was to register a new end-use product, Richgrow Moss Control Broadcast Grade for application on turf to control moss.

Chemistry Assessment

Richgrow Moss Control Broadcast Grade is formulated as a granular product containing iron (present as ferrous sulfate monohydrate) at a concentration of 85%. This end-use product has a density ranging from 1151 to 1201 kg/m³ and pH ranging from 2.5 to 3.0. The required chemistry data for Richgrow Moss Control Broadcast Grade have been provided, reviewed and found to be acceptable.

Health Assessments

The toxicology profile of Richgrow Moss Control Broadcast Grade is the same as that of the registered TGAI, Ferrous Sulfate Monohydrate (registration number 23874). It is slightly acutely toxic by the oral route and is of low acute toxicity by the dermal and inhalation routes, corrosive to eyes, irritating to skin and respiratory tract, and is not considered as a skin sensitizer.

There is no occupational concern anticipated from the use of Richgrow Moss Control Broadcast Grade because of adequate exposure mitigation measures present on the label, which include precautionary (e.g., wearing of personal protective equipment) statements and a restricted entry to treated areas until the surface is dried. The label has necessary exposure mitigation measures for bystander protection.

A dietary exposure assessment was not required for this application.

As of December 13, 2017, the PMRA had received three domestic animal incidents involving ferrous sulfate. No human incidents involving ferrous sulfate were submitted to the PMRA.

One domestic animal incident was considered to be related to the reported pesticide. In this incident, a dog experienced bloody diarrhea and vomiting after ingesting a product containing ferrous sulfate. The pet had access to the product bag resulting in exposure. The label of Richgrow Moss Control Broadcast Grade does contain storage directions

requiring the product to be stored away from children and pets.

Overall, the assessment of incident reports for iron (present as ferrous sulfate monohydrate) did not identify any significant health concerns.

Environmental Assessment

The use of Richgrow Moss Control Broadcast Grade will not increase the environmental exposure relative to the currently registered product Richgrow Moss Control (registration number 31162). Therefore, risks of concern are not expected. Environmental concerns have been mitigated through adequate statements on the product label.

Value Assessment

Richgrow Moss Control Broadcast Grade contains a higher concentration of iron (present as ferrous sulfate monohydrate) than the only other product containing this active ingredient and that is registered for application to turf for moss control. The applicator of Richgrow Moss Control Broadcast Grade would need to handle approximately one-third less product to achieve the same rate of active ingredient thereby increasing the efficiency of the application. As it is primarily the degree of hydration of iron sulfate that differs between Richgrow Moss Control Broadcast Grade (in the monohydrate form) and the registered product (in the heptahydrate form) and as both products are activated by water, it is expected that the level of moss control would be similar between the two products.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information sufficient to support the registration of Richgrow Moss Control Broadcast Grade.

References

PMRA Document Number	Additional Information Considered
2341630	2013 Ferrous sulfate NHPD, DACO: 4.8
1812895	2009, http://www.inchem.org/documents/jecfa/jecmono/v18je18.htm 13/, 571. Iron (WHO Food Additives Series 18) http://www.inchem.org/documents/jecfa/jecmono/v18je18.htm 13/, DACO: 4.8

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