

Evaluation Report for Category B, Subcategory 2.1, 2.3, 2.4, 2.5, 3.13, & 3.4 Application

Application Number: 2008-5020
Application: New EP Product Chemistry-Guarantee, Identity of Formulants, Proportion of Formulants, Formulation Type
New to Product Labels-Precautions, Application Method
Product: Eagle Granular Turf Fungicide
Registration Number: 29974
Active ingredients (a.i.): Myclobutanil
PMRA Document Number : 1999711

Purpose of Application

The purpose of this application was to register a new end-use product, Eagle Granular Turf Fungicide, to control dollar spot (*Sclerotinia homoeocarpa*) on turfgrass and is based on a precedent product, Eagle WSP Turf and Ornamental Fungicide (Registration Number 26585). Eagle WSP Turf and Ornamental Fungicide (containing myclobutanil 40%), is currently registered for control of dollar spot in Canada. Eagle 20EW Specialty Fungicide (containing myclobutanil 19.7%) is registered in the United States (EPA Reg. No. 62719-463) for the same use.

Chemistry Assessment

Eagle Granular Turf Fungicide is formulated as a solution containing myclobutanil at a nominal concentration of 0.39%. This end-use product has a density of 0.769 g/mL and a pH of 7.99. The chemistry requirements for Eagle Granular Turf Fungicide are complete, with the exception of the storage stability study that will be submitted in 2011.

Health Assessments

Eagle Granular Turf Fungicide (Myclobutanil) is of low acute toxicity by the oral route ($LD_{50} > 5000$ mg/kg bw/day) and by the dermal route ($LD_{50} > 5000$ mg/kg bw/day) in rats. Eagle Granular Turf Fungicide is minimally irritating to the eyes (MAS = 1.1/110) and non-irritating to the skin (MAS = 0/8) of rabbits. It is not a dermal sensitizer to the guinea pigs. Eagle Granular Turf Fungicide contains large, non inhalable particles which are resistant to attrition and therefore cause no acute inhalation toxicity.

Risk to workers mixing/loading and applying Eagle Granular Turf Fungicide to golf course turf was calculated and is considered to be acceptable. Post-application exposure to workers and golfers contacting treated turf is expected to be lower for granular products than for the

registered products which are applied as a liquid, and therefore is not expected to increase over the currently registered use pattern.

Environmental Assessment

An environmental risk assessment for birds and mammals and to evaluate drift was required to support the registration of the proposed new end-use product, Eagle Granular Turf Fungicide, containing myclobutanil at 0.39%. Wild mammals and birds may be at risk on the site of application due to consumption of contaminated food items. However, this risk is not expected to be significantly higher than that estimated for the use of the registered precedent product, Eagle WSP Turf and Ornamental Fungicide (Registration number 26585). As the use of the proposed product is limited to golf courses, it is not expected to result in an environmental risk that is unacceptable.

Value Assessment

The results from three field trials were reviewed for the control of dollar spot (*S. homoeocarpa*) on creeping bentgrass (*A. palustris*) with Eagle Granular and Eagle WSP Fungicide. Disease pressure was slow to develop on the plots in all three trials, however, sufficient disease pressures were observed with incidences of 16 – 44% in the untreated controls. In all three trials, both Eagle Granular Turf Fungicide and Eagle WSP Turf and Ornamental Fungicide significantly reduced disease infection compared to the untreated controls. Percentages of disease control with Eagle Granular (84 to 92% of control) were comparable to that with Eagle WSP (88 to 93% of control). Higher disease control was achieved with 2 kg/100 m² Eagle Granular (91%) compared to the rate of 1.5 kg/100 m² Eagle Granular Turf Fungicide (85%).

Conclusion

The PMRA has completed the assessment of all available information and is able to support the full registration of Eagle Granular Turf Fungicide to control dollar spot (*Sclerotinia homoeocarpa*) on turfgrass.

References

PMRA No.	Title
1664760	2001, Eagle Granular Turf Fungicide: Product Chemistry for a formulation of Myclobutanil, DACO: 3.5 CBI
1664763	2001, Determination of percentage myclobutanil in a stability study sample of Eagle Fertilizer Granular, DACO: 3.5.10 CBI
1664765	2000, GPL Analysis of Eagle Fertilizer Granular, DACO: 3.4.1 CBI
1664766	2000, GPL Analysis of Eagle Fertilizer Granular, DACO: 3.4.1 CBI
1701772	2009, Product Identification (3.1.1 to 3.1.4) for Eagle Granular Turf Fungicide (2008-5020), DACO: 3.1.1,3.1.2,3.1.3,3.1.4 CBI
1701773	2009, Eagle Granular Turf Fungicide Container Material and Description, DACO: 3.5.5
1876950	1997, Determination of Myclobutanil (Systhane) (Eagle), DACO: 3.4.1 CBI
1909869	1996, Myclobutanil Chromatographs, DACO: 3.4.1 CBI

- 1664768 GF-1480: Acute Oral Toxicity Up and Down Procedure in Rats. Laboratory report number: 15761, 040323. Study report date: 04 January 2005. Unpublished. DACO 4.6.1.
- 1664769 2005, GF-1480: Acute Dermal Toxicity Study in Rats – Limit Test. Laboratory report number: 15762, 040324. Study report date: 05 January 2005. Unpublished. DACO 4.6.2.
- 1664767 2008, Waiver request. DACO 4.6.3.
- 1664770 2005, Primary Eye Irritation Study in Rabbits. Laboratory report number: 15763, 040327. Study report date: 01 February 2005. Unpublished. DACO 4.6.4.
- 1664771 2005, GF-1480: Primary Skin Irritation Study in Rabbits. Laboratory report number: 15764, 040326. Study report date: 01 February 2005. Unpublished. DACO 4.6.5.
- 1664773 2004, GF-1480: Dermal Sensitization Study in Guinea Pigs (Buehler Method). Laboratory report number: 15765, 040325. Study report date: 20 October 2004. Unpublished. DACO 4.6.6.
- 1701774 2009, Eagle Granular Turf Fungicide (2008-5020) Use Description/Scenario, DACO: 5.1, 5.2
- 1876949 2010, 100312 CL Response to deficiencies 2008-5020-Eagle Granular-new formulation, DACO: 0.8
- 1876951 2010, Biodac 20/50 Mesh/SGN 80-100 - Technical Bulletin, DACO: 9.6.1
- 1966789 PRVD2010-04 Proposed Re-Evaluation Decision, Myclobutanil
- 1701769 2009, Eagle Granular Turf Fungicide Value Summary, DACO: 10.1
- 1664775 2005, Eagle Granular Turf Fungicide: Control of Dollar Spot on Turf, DACO: 10.2.3.3
- 1664776 2005, Eagle Granular Turf Fungicide: Control of Dollar Spot on Turf, DACO: 10.2.3.3
- 1664777 2007, Eagle Granular Turf Fungicide: Control of Dollar Spot on Turf, DACO: 10.2.3.3

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