

# **Evaluation Report for Category B, Subcategory 3.2, 3.3 Application**

**Application Number:** 2011-1563

**Application:** B.3.2 (Changes to Product Labels-Application Timing)

B.3.3 (Changes to Product Labels-Application Number or

Frequency)

**Product:** NEU1173H RTU With Pull'n Spray Applicator

**Registration Number:** 29531

**Active ingredients (a.i.):** iron (present as FeHEDTA) (IRN)

PMRA Document Number English PDF: 2078705

# **Background**

NEU1173H RTU With Pull'n Spray Applicator has been registered since April 14, 2010. NEU1173H RTU With Pull'n Spray Applicator is registered for application at 0.5 to 1.0 g a.i./m² (applied just to the point of runoff, or 200 to 400 ml product/m²) to lawn turf consisting of one or more of Kentucky bluegrass, perennial ryegrass and fescue (tall fescue, chewings fescue and/or creeping fescue) for the control or suppression of several broadleaved weeds. Prior to the subject application to amend the registration of this product, treatment was limited to turf that was established, and the number of applications was limited to a maximum of two per area per year with at least 4 weeks between applications.

# **Purpose of Application**

The purpose of this application was to remove the value-related conditions to the registration of NEU1173H RTU With Pull'n Spray Applicator, remove the limitation of applying only to established turf, increase the maximum number of applications to four per year, reduce the minimum application interval to three weeks and include a claim of control for an additional weed (wild geranium).

# **Chemistry Assessment**

NEU1173H RTU With Pull'n Spray Applicator is formulated as a solution containing Iron (present as FeHEDTA) at a nominal concentration of 0.250 %. This end-use product has a density of 1.02 g/cm<sup>3</sup> and pH of 5.81. The chemistry requirements for NEU1173H RTU With Pull'n Spray Applicator are complete.

# **Health Assessments**

Health assessments were not required for this application.



#### **Environmental Assessment**

The amendments to the label of NEU1173H RTU With Pull'n Spray Applicator to add a new pest (wild geranium), a new lower rate (100 mL solution/m²), to increase the frequency from 2 to 4 applications per year and to decrease the retreatment interval from greater than 4 weeks to 3 weeks are not expected to result in an unacceptable risk to the environment. Environmental concerns have been mitigated through adequate statements on the product label.

### **Value Assessment**

In support of removing efficacy-related conditions to the registration of NEU1173H RTU With Pull'n Spray Applicator, data were submitted from ten field trials conducted in 2010 in which the efficacy of formulated chelated iron, identified as 'NEU1173H' and applied at labelled rates, was evaluated for the control of specific broadleaved weeds. The tested formulation was applicable to NEU1173H RTU With Pull'n Spray Applicator.

The submitted data generated for dandelion, broadleaved plantain, white clover, creeping buttercup, Canada thistle, bull thistle, and moss were adequate to confirm labeled efficacy claims.

In support of removing non-safety adverse effects conditions to the registration of NEU1173H RTU With Pull'n Spray Applicator, data were submitted from one greenhouse study and 13 field studies conducted in 2010 in which the tolerance of turf grasses to applications of 'NEU1173H' at or above labeled rates was evaluated. Studies were conducted on established turf, except for the greenhouse study in which the tolerance of seedlings of Kentucky bluegrass, chewings fescue, creeping red fescue and tall fescue that were eight weeks old at the time of initial application to 'NEU1173H' was assessed, one field study in which the tolerance of newly seeded turf (Kentucky bluegrass, tall fescue and perennial ryegrass) that was four to eight weeks old at the time of initial application of 'NEU1173H' was assessed, and one field study in which the tolerance of newly established perennial ryegrass turf to 'NEU1173H' was assessed.

An assessment of the studies submitted with the present application indicated that the tolerance of established turf consisting of one or more of Kentucky bluegrass, perennial ryegrass, and fescue (tall fescue, hard fescue, and fine fescue (creeping red and chewings)) to 'NEU1173H' applied up to four times at rates of up to 1.0 g a.i./m² with an application interval of three or more weeks can be expected to be adequate. Furthermore, the tolerance of new turf that is four or more weeks old at the time of initial application can also be expected to be adequate, as demonstrated with both greenhouse and field studies. The data consistently demonstrated that turf substantially recovered from any injury prior to the next application made three weeks later. Maximum injury to turf often occurred after the second and third applications of 'NEU1173H', where applications were made three or more weeks apart, after which injury was lower, even following a fourth application. This would indicate that injury is generally not cumulative past the second application and that a three week application interval appears to allow sufficient time for turf to recover from any injury prior to a subsequent application, provided that turf is not environmentally stressed e.g. drought.

The tolerance of turf that is less than four weeks old at the time of the initial application was not evaluated. Therefore, a cautionary statement was added to the label in which it is advised that NEU1173H RTU With Pull'n Spray Applicator should not be applied to newly seeded turf until at least 4 weeks after emergence.

# **Conclusions**

The PMRA has completed an evaluation of the subject application and has found the information sufficient to remove the conditions to the registration of NEU1173H RTU With Pull'n Spray Applicator and to amend the registration of NEU1173H RTU With Pull'n Spray Applicator to include the option of applying to newly seeded turf that is four or more weeks old, of applying up to four times per area per year with an application interval of three or more weeks, and to include a claim of control for wild geranium.

# References

2038965	2011, Analysis of Iron in NEU1173H RTU by ICP-MS, DACO: 2.14.14,3.5.10 CBI
2038749	2011, Herbicidal activity of NEU1173H, DACO: 10.2.3.2
2038750	2011, Tolerance of different grass species to repeated application of NEU1173H - Spring 2010, DACO: 10.3.2
2038751	2010, Part 1 Field Evaluation of an Herbicide on Canada Thistle in Perennial Ryegrass, DACO: 10.2.3.2,10.3.2
2038752	2010, Part 2 Field Evaluation of an Herbicide on Canada Thistle in Perennial Ryegrass, DACO: 10.2.3.2,10.3.2
2038753	2010, Part 3 Field Evaluation of an Herbicide on Canada Thistle in Perennial Ryegrass, DACO: 10.2.3.2,10.3.2
2038754	2011, Research Trial Report, DACO: 10.2.3.2

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