

Evaluation Report for Category B, Subcategory 2.1, 2.3, 2.4, 3.12 Application

Application Number: 2013-4039
Application: B.2.1 - New Product Chemistry Guarantee
B.2.3 - New Identity of Formulants
B.3.12 - New Site or Host
Product: Piccolo 10 XC Plant Growth Regulator Solution
Registration Number: 31809
Active ingredients (a.i.): Paclobutrazol
PMRA Document Number: 2523052

Purpose of Application

The purpose of this application was to register a new end use product Piccolo 10XC Plant Growth Regulator Solution for use on ornamental plants grown in containers in nurseries and greenhouses to reduce internode elongation, resulting in more desirable compact plants. Piccolo 10XC is for use on all host plants labelled for Piccolo (Reg. No. 28400) and as well to include 13 more host plants, including calibrachoa, penstemon, cosmos, coreopsis, gaura, *Hypericum calycinum*, *Lantana camara*, marigold, monarda, verbena, veronica, pot sunflower, and Easter lilies.

Chemistry Assessment

Piccolo 10XC Plant Growth Regulator Solution is formulated as an emusifiable concentrate containing paclobutrazol at a nominal concentration of 4%. This end-use product has a density of 1.011 - 1.021 g/mL and pH of 5.5. The chemistry requirements for this product have been fulfilled.

Health Assessments

Piccolo 10 XC Plant Growth Regulator Solution is of low toxicity via the oral, dermal and inhalation routes, is severely irritating to the eye and is slightly irritating to the skin. Piccolo 10 XC Plant Growth Regulator Solution is not considered a dermal sensitizer.

The use of Piccolo 10XC Plant Growth Regulator Solution is within the currently registered use patterns for the active ingredient Paclobutrazol. Therefore, no risks of concern are expected from these uses, provided that workers follow the label directions and wear the personal protective equipment identified on the label.

Environmental Assessment

The use of Piccolo 10 XC Plant Growth Regulator Solution falls within the existing use pattern for the active ingredient paclobutrazol. As the use is for indoor use, no environmental exposure is expected

Value Assessment

Value information submitted for review included data from 17 greenhouse studies conducted in the US. All studies were scientifically designed and conducted using normal greenhouse procedures.

Performance of Piccolo 10XC Plant Growth Regulator Solution applied either by foliar spray or drench was directly compared to the registered Piccolo Plant Growth Regulator Solution or Bonzi Plant Growth Regulator Solution applied by the same methods at the same rates for 6 labelled host plants, including celosia, petunias, salvia, chrysanthemum, impatiens, and poinsettias, in 9 trials. Twelve of the 13 new host plants were assessed for the Piccolo 10XC Plant Growth Regulator Solution treatments in 9 trials.

Based on the information available, it can be concluded that Piccolo 10XC Plant Growth Regulator Solution is equally effective in regulating plant height and width compared to the registered Piccolo Plant Growth Regulator Solution and Bonzi Plant Growth Regulator Solution. Therefore, all host plants labelled for Piccolo Plant Growth Regulator Solution are supported to be included on the Piccolo 10XC Plant Growth Regulator Solution label.

Each of the 12 new host plants was included in 1 to 4 studies, including calibrachoa, penstemon, cosmos, coreopsis, gaura, *Hypericum calycinum*, *Lantana camara*, marigold, monarda, veronica, pot sunflower, and Easter lilies. Based on the weight of evidence, inclusions of these host plants on the Piccolo 10XC Plant Growth Regulator Solution label are supported.

Information was not submitted in support of verbena. Since (1) verbena is labelled for Piccolo 10XC PGR (EPA. Reg. No. 62097-25) at similar rates in the United States and (2) the mode of action of paclobutrazol in regulating plant growth is attributed to inhibition of gibberellin synthesis, verbena is acceptable to appear on the label.

Piccolo 10XC Plant Growth Regulator Solution contains paclobutrazol at a concentration of 4%, which is 10-fold higher than that present in two similar products registered in Canada which are Bonzi Plant Growth Regulator Solution and Piccolo Plant Growth Regulator Solution. Delivering the same amount of Piccolo 10XC Plant Growth Regulator Solution will cover 10 times more plants (pots).

The registration of Piccolo 10XC Plant Growth Regulator Solution for plant height and width control can be supported from a value standpoint.

Conclusion

PMRA has reviewed information provided in support of the registration of Piccolo 10XC Plant Growth Regulator Solution. Based on this review, Piccolo 10XC Plant Growth Regulator Solution is acceptable for registration.

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