



Evaluation Report for Category B, Subcategory 2.6 Application

Application Number: 2007-8427
Application: B.2.6 New EP product chemistry - new combination of TGAIs
Product: Headway
Registration Number: 29295
Active ingredients (a.i.): Azoxystrobin (AZY), Propiconazole (PON)
PMRA Document Number: 1741622

Purpose of Application

Syngenta Crop Protection Canada Inc. has submitted an application to register the new end-use product, Headway, containing the active ingredients azoxystrobin and propiconazole, to control fungal diseases on turf.

Chemistry Assessment

The fungicide, Headway, is an emulsifiable concentrate containing 103.9 g/L propiconazole and 62.4 g/L azoxystrobin. The formulation has a density of 1.09 g/mL and a pH of 5-7. The chemistry requirements for Headway are complete.

Health Assessments

Headway EC exhibits low acute oral ($LD_{50} \text{♀} = 2176 \text{ mg/kg bw}$), dermal ($LD_{50} \text{♂♀} > 5050 \text{ mg/kg}$) and inhalation ($LC_{50} \text{♀} > 2.68 \text{ mg/L}$) toxicity in the rat. It is moderately irritating ($MAS^a = 28.7 / 110$) to the eye of the rabbit, non-irritating to skin of the rabbit and is not a dermal sensitizer in the guinea pig.

A risk assessment was conducted for the proposed uses of Headway Fungicide on golf courses and on sod farm turf. The exposure of workers to azoxystrobin and to propiconazole when mixing, loading and applying Headway on golf courses and on sod farms is acceptable when workers wear a long sleeve shirt, long pants, shoes and socks, and gloves and follow label directions.

The exposure for golfers and workers aerating, fertilizing, pruning, scouting, seeding and performing mechanical weeding, is acceptable on the day of application, once residues have dried. For sod farm and golf course workers performing other activities (harvesting and transplanting treated turf, mowing, watering, cup changing, repairing irrigation equipment, and miscellaneous grooming), restricted entry intervals are required.

Environmental Assessment

This new end-use product (EP) is a combination of actives with a similar use pattern to that of the conditionally registered product Heritage Maxx (Reg. 28393) and fully registered product Banner Maxx (Reg. # 27003). There are no formulants or contaminants of concern to the environment in the EP or in either of the active ingredients. In order to maintain consistency with other products containing the same active ingredients the buffer zones for this new EP were calculated using the same three depth model as was used for Heritage Maxx. It should be noted that buffer zones for aquatic depths >3 m and for terrestrial habitats are currently under review and may be subject to change.

Value Assessment

Data from two efficacy trials on *Fusarium* patch were submitted in order to address higher rates of azoxystrobin in Headway compared to the rates in the tank-mix of Heritage MAXX and Banner MAXX Fungicides. The rates of active ingredients for all other disease claims are equal to or less than those currently registered. The results from *Fusarium* patch trials show that, under high disease pressure, the higher rate provided more consistent control of *Fusarium* patch at the longer application interval. The label states that the higher rate should be used under severe disease pressure and the shorter application interval should be used during prolonged periods of conditions favourable to disease development.

A rationale was submitted to support the claim for grey and pink snow mould on the Headway label. The registrant stated that azoxystrobin, applied alone, cannot provide commercially acceptable and consistent control of the grey snow mould species, *Typhula ishikariensis*. This pathogen is not registered on the Heritage MAXX (azoxystrobin) label. Therefore, the proposed rate of Headway is supported in order to provide the full rate of propiconazole registered on the Banner MAXX label in order to allow broad-spectrum control of all snow mould diseases.

The registration of Headway will provide broad spectrum disease control in turf while eliminating the need for tank-mixing the two products. The claim of control of the diseases on turf listed on the Headway label are supported.

Conclusion

An evaluation of available scientific information found that, under the approved conditions of use, Headway has value and does not present an unacceptable risk to human health or the environment. The PMRA can support the conditional registration of this product.

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