

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

Application Number: 2020-2502
Application: New End-Use Product (Product Chemistry) – Guarantee, Identity of Formulants and Proportion of Formulants
Product: MASTERLOCK
Registration Number: 34451
Active ingredient (a.i.): Surfactant Blend / Adjuvant
PMRA Document Number: 3306879

Purpose of Application

The purpose of this application is to register MASTERLOCK, a new adjuvant end-use product to be used with selected fungicides containing prothioconazole, pydiflumetofen, and propiconazole.

Chemistry Assessment

MASTERLOCK is formulated as an emulsifiable concentrate containing surfactant blend at a concentration of 100%. This adjuvant has a density of 0.896 g/cm³ and pH of 4.53. The required chemistry data for MASTERLOCK have been provided, reviewed and found to be acceptable.

Health Assessments

MASTERLOCK is of low acute toxicity via the oral, dermal and inhalation routes of exposure and non-irritating to the eye and skin. MASTERLOCK is not a dermal sensitizer.

The use of the new surfactant blend MASTERLOCK is not expected to result in potential occupational or bystander exposure over the registered use of other surfactant blends. No health risks of concern are expected when workers follow label directions and wear personal protective equipment as stated on the label.

No new residue data were submitted for MASTERLOCK, a new adjuvant to be used with selected fungicides already labelled for use with non-ionic surfactants. Previously reviewed residue data were re-assessed in the framework of this application. Based on this assessment, residues of prothioconazole, pydiflumetofen, and propiconazole are not expected to be greater than that for the currently registered uses and will be covered by the established maximum residue limits (MRLs) of the selected fungicides on the MASTERLOCK label. Consequently, dietary exposure to prothioconazole, pydiflumetofen, and propiconazole are not expected to increase with the registration of MASTERLOCK and will not pose health risks of concern to any segment of the population, including infants, children, adults, and seniors.

Environmental Assessment

The registration of a new commercial adjuvant end-use product, MASTERLOCK, is acceptable from an environmental perspective.

Value Assessment

Efficacy data from 40 trials conducted in Canada and the USA in 2019 – 2020 were submitted in support of the use claims on the MASTERLOCK adjuvant label. The performance of MASTERLOCK applied in combination with a list of fungicides has been confirmed on canola and wheat, as compared to the registered adjuvants. Overall, MASTERLOCK at the tested rates demonstrated a level of efficacy comparable to the registered adjuvants on the tested crops.

The supporting evidence confirmed the value of MASTERLOCK when tank mixing with the listed fungicides against various diseases on canola or wheat. Therefore, the uses of MASTERLOCK tank-mixed with listed fungicides are supported for ground and aerial applications on canola and wheat (durum, spring and winter).

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 MASTERLOCK.

References

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