Health Canada Santé Canada

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

Application Number: 2015-1126
Application: New EP Product Chemistry-Guarantee
New EP Product Chemistry-Identity of Formulants
New EP Product Chemistry-Proportion of Formulants
Product: Topsurf Non-ionic Spray Adjuvant
Registration Number: 32279
Active ingredients (a.i.): Surfactant blend
PMRA Document Number : 2554854

Purpose of Application

The purpose of this application was to register a new adjuvant, Topsurf Non-ionic Spray Adjuvant containing a surfactant blend, to be tank mixed with a number of herbicidal, fungicidal and insecticidal products which are applied to crops and non-crop areas.

Chemistry Assessment

Topsurf Non-Ionic Spray Adjuvant is formulated as a liquid containing a proprietary surfactant blend at a nominal concentration of 100.00%. This end-use product has a specific gravity of 1.030– 1.040 and pH of 6.9. The chemistry requirements for Topsurf Non-Ionic Spray Adjuvant are complete.

Health Assessments

Topsurf Non-Ionic Spray Adjuvant was considered to be of high acute oral and dermal toxicity, and low acute inhalation toxicity. It was considered to be mildly irritating to the eyes and skin and to be a skin sensitizer.

No new residue data were submitted to support the registration of Topsurf Non-ionic spray adjuvant. The new adjuvant is similar to previously registered surfactant blends and has a similar use pattern. When it is used together with end-use products containing various active ingredients on various crops and non-crop areas, no change in the magnitude of residues is expected in the treated crops. Therefore, dietary exposure to these active ingredients is not expected to increase, and will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Non-ionic surfactants are currently registered for use in Canada in other adjuvants, and the proposed use is not expected to result in an expansion of use over the registered use pattern. No health risks of concern are expected when workers follow the label directions and wear the personal protective equipment identified on the label.

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Environmental Assessment

As the components of the surfactant blend mixture are contained in currently registered products for the same use pattern, the new adjuvant is not expected to result in a potential increase in the impact and exposure to the environment. The product label contains adequate statements for environmental protection.

Value Assessment

The applicant submitted reports of a total of 24 replicated small-scale field performance studies. In each study, the performance of Topsurf Non-ionic Spray Adjuvant applied with a particular herbicide or herbicide tank mixture compared to a treatment of that herbicide without adjuvant and/or a treatment(s) of that herbicide applied with a recommended adjuvant, as per the label of the herbicide and/or that of the adjuvant.

Addition of Topsurf Non-ionic Spray Adjuvant to herbicide treatments resulted in similar or improved weed control over the same treatments without adjuvant and/or similar control to that of the same herbicide treatments with a registered surfactant option. As performance of Topsurf Non-ionic Spray Adjuvant was demonstrated to be similar to other non-ionic surfactants that are labelled for use with tested herbicides belonging to multiple modes of action, it is reasonable to anticipate that Topsurf Non-ionic Spray Adjuvant applied with other herbicides listed on the Topsurf Non-ionic Spray Adjuvant label would be of similar performance to other non-ionic surfactants that are registered for use with those herbicides. In 23 of these studies in which herbicide treatments were applied to a crop, Topsurf Non-ionic Spray Adjuvant was similar to other surfactants that are registered for use with each of the tested herbicides in terms of crop safety (*e.g.*, level of crop injury).

While the performance of Topsurf Non-ionic Spray Adjuvant was only evaluated in combination with herbicides, its performance would also be expected to be similar to that of non-ionic surfactants that are labelled for use with fungicide, insecticide and plant growth regulator products that are listed on the Topsurf Non-ionic Spray Adjuvant label.

The availability of Topsurf Non-ionic Spray Adjuvant will provide growers and applicators an additional non-ionic surfactant option and, therefore, may provide users an economic benefit through increased competition in the marketplace.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided and is able to support the registration of the new end-use product, Topsurf Non-Ionic Spray Adjuvant.

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Information submitted by registrant

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Additional information

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