

Evaluation Report for Category B, Subcategory 2.1 Application

Application Number: 2023-1386
Application: Changes to End-Use Product Chemistry - Guarantee
Applicant: Security Equipment Corporation
Product: Frontiersman Xtra Bear Attack Deterrent
Registration Number: 28410
Active ingredients (a.i.): Capsaicin and related capsaicinoids
PMRA Document Number: 3582889

Purpose of Application

The purpose of this application was to increase the label guarantee for Frontiersman Xtra Bear Attack Deterrent from 1.0% to 1.2% for capsaicin and from 0.84% to 1.0% for related capsaicinoids.

Chemistry Assessment

Frontiersman Xtra Bear Attack Deterrent is formulated as a compressed liquid (pressurized product) containing capsaicin at a concentration of 1.2% and related capsaicinoids at a concentration of 1.0%. This end-use product has a density of 0.9878 g/cm³ and a pH of 4.87 (for 1% solution without propellant). The required chemistry data for Frontiersman Xtra Bear Attack Deterrent have been provided, reviewed and found to be acceptable.

Health Assessments

No new toxicological data were submitted or required to support the increase to the label guarantee for capsaicin from 1.0% to 1.2 % and for related capsaicinoids from 0.84% to 1.0%. Capsaicin and related capsaicinoids were recently re-evaluated by the PMRA (PRVD2022-14/RVD2023-10, *Capsaicin and Related Capsaicinoids and their Associated End-use Products*). These active ingredients are of low acute oral toxicity, and are irritating to the skin, eyes and upper respiratory tract and are potential sensitizers. The changes to the label guarantee will not significantly impact the toxicological properties of Frontiersman Xtra Bear Attack Deterrent.

The increase of the label guarantee for capsaicin from 1.0% to 1.2 % and for related capsaicinoids from 0.84% to 1.0% is not anticipated to significantly increase exposure to applicators and bystanders if the precautionary label statements are observed. Label warnings, restrictions and risk mitigation measures are adequate to protect users of Frontiersman Xtra Bear Attack Deterrent. Overall, occupational risks to users are acceptable when the precautionary statements on the label are followed.

A dietary risk assessment was not required for this application.

Environmental Assessment

The changes to the label guarantee for Frontiersman Xtra Bear Attack Deterrent are not expected to lead to any additional risks to the environment.

Value Assessment

An increase in the amount of capsaicin and related capsaicinoids in Frontiersman Xtra Bear Attack Deterrent was supported from a value perspective as the product is expected to be at least as efficacious at deterring bear attacks as the previous formulation.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information acceptable to support the increase to the label guarantee for Frontiersman Xtra Bear Attack Deterrent.

References

PMRA

Document

Number

Reference

3452232	2023, DACO 3.5.13 Miscibility, DACO: 3.5.13 CBI
3452233	2023, DACO 3.5.15_Dielectric Breakdown Voltage, DACO: 3.5.15 CBI
3452234	2023, Frontiersman XTRA Bear Deterrent Product Chemistry, DACO: 3.5.11,3.5.12,3.5.14,3.5.7,3.5.8,3.5.9 CBI
3452229	2023, DACO 5.2 Use Description Scenario (Application and Post- application), DACO: 5.2

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