

Evaluation Report for Category B, Subcategory 2.1, 3.1, 3.11, 3.12, 3.13, 3.14 Application

Application Number: 2008-1726
Application: B.2.1 – New Guarantee
B.3.1 – Application Rate Increase
B.3.11 – New Pests
B.3.12 – New Site
B.3.13 – New Precautions
B.3.14 – New Classification
Product: Safer’s TopGun Herbicide Concentrate
Registration Number: 29343
Active ingredients (a.i.): Fatty Acids
PMRA Document Number: 1773307

Purpose of Application

The purpose of this application is to register the commercial end use product, Safer’s TopGun Herbicide Concentrate.

Chemistry Assessment

Safer’s TopGun Herbicide Concentrate is an emulsifiable concentrate containing the active ingredient fatty acids at a nominal concentration of 18 %. This product has a density of 0.95 kg/L and a pH of 2.7. The chemistry requirements for Safer’s TopGun Herbicide Concentrate have been completed.

Health Assessments

Fatty acid is of low acute toxicity, with an acute oral LD₅₀ (rats) > 10,000 mg/kg bw, and an acute inhalation LC₅₀ (rats) > 5.53 mg/L. Since the technical grade active ingredient is classified as low toxicity, the end-use product Safer’s TopGun Herbicide Concentrate is also expected to be of low toxicity irrespective of the route of exposure.

Fatty acid is moderately irritating to eyes with a maximum average score of 44.22/110 (at 24, 48 & 72 hours), and moderately irritating to skin with a primary irritation score of 3.5/8. Safer’s TopGun Herbicide Concentrate is considered as a dermal and eye irritant.

Fatty acid is sensitizing to skin in guinea pigs. Therefore, Safer’s TopGun Herbicide Concentrate is considered as a skin sensitizer.

The label statements for Safer’s TopGun Herbicide Concentrate (Wear safety goggles or face shield, rubber gloves, long sleeved shirt, long pants, socks and shoes during mixing/loading and application, as well as during clean-up and maintenance of equipment; do not

re-enter the treated area until the residues have dried) adequately address any concerns from occupational exposure to the applicator(s) and bystander(s).

Since Safer's TopGun Herbicide Concentrate is an herbicide and not intended for crop application, no or minimal food and residue exposure is expected.

Environmental Assessment

Herbicidal fatty acids will dissipate quickly in the environment. They are not toxic to the terrestrial organisms tested, however, they have been found to be slightly toxic to fish and toxic to daphnids. The use of hand-held application methods, the rapid dissipation of the fatty acids in the environment, and label statements will limit any risk to aquatic organisms.

Value Assessment

Data from 3 efficacy trials were submitted in support of a pest claim for common ragweed. Treatment application was made to roadsides in Quebec in 2007 with a custom-built spray boom attached to the front of a water tanker truck. Each trial included two 1 x 100 meter treated strips each with a 1 x 1 meter untreated plot. Visual percent control of common ragweed was reported once at 7 days after treatment. A consistent level of common ragweed control was observed in these trials; mean control of 95% with a maximum control of 96% and a minimum control of 94%.

The other uses on Safer's TopGun Herbicide Concentrate (including vacant lots, storage areas, greenhouses, plant nurseries, recreational areas, parks, power substations and industrial sites, and tank farms) are similar to the cited precedent product, Safer's TopGun Weed Killer (Reg. No. 22245) registered uses (such as around buildings, fences, gravel or bark mulch, around shade trees, on sidewalks or driveways). Therefore, the efficacy of Safer's TopGun Herbicide Concentrate is expected to be acceptable for these uses.

Conclusion

Safer's TopGun Herbicide Concentrate is acceptable for full registration.

References

- 1600802: Efficacy summary – TopGun Weed Killer. Woodstream Canada Corporation. DACO. 10.2.3.3. pp. 25.
- 1699175 1986, Acute Inhalation Safer's H-2 Herbicide. DACO: 4.6.3
- 1608427 2008, Use Description/Scenario. DACO: 5.2
- 1729267 2000, A Primary Eye Irritation Study in Rabbits with TopGun 18% Concentrate, 3526.5, MRID: N/A, DACO: 4.6.4

1734249 2009, Use Description/Scenario. DACO: 5.2

1732450 2009, Use Description/Scenario. DACO: 5.2

1732451 2009, Use Description/Scenario. DACO: 5.2

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1742159 1988, Review of Primary Eye Irritation Studies Using Safer Herbicide H-2 "TopGun", BCH 29988, DACO : 4.6.

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