

## Evaluation Report for Category B, Subcategory 2.1, 2.3 and 3.11 Application

**Application Number:** 2011-5341  
**Application:** Product Chemistry – guarantee  
Product Chemistry – identify of formulants  
Product Labels – new pests  
**Product:** Green It 4-in-1 Grass and Weed Killer Concentrate  
**Registration Number:** 31350  
**Active ingredients (a.i.):** Ammonium salt of fatty acid  
**PMRA Document Number :** 2204348

### Purpose of Application

The purpose of this application was to register a new domestic class end-use product, Green It 4-in-1 Grass and Weed Killer Concentrate, containing ammonium salt of fatty acid, for contact spray control or rapid burndown of weeds, grasses, moss and algae.

### Chemistry Assessment

Green It 4-in-1 Grass and Weed Killer Concentrate is formulated as a solution containing ammonium salt of fatty acid at a nominal concentration of 36.0%. This end-use product has a density of 1.0-1.03 g/cm<sup>3</sup> and pH of 8-9. The chemistry requirements for Green It 4-in-1 Grass and Weed Killer Concentrate are complete.

### Health Assessments

Green It 4-in-1 Grass and Weed Killer Concentrate is a repack of the TGAI. Since the TGAI is of low toxicity, Green It 4-in-1 Grass and Weed Killer Concentrate is also expected to be of low toxicity. Green It 4-in-1 Grass and Weed Killer Concentrate is likely to be moderately irritating to the eye, mildly irritating to skin and irritating to the respiratory tract.

The proposed and recommended precautionary label statements for Green It 4-in-1 Grass and Weed Killer Concentrate are considered sufficient to address any significant exposure to the applicator(s), bystander(s) and domestic-users.

As the end-use product is an herbicide intended for non-crop applications, no food residue exposure is expected from the proposed uses.

### Environmental Assessment

The use of Green It 4-in-1 Grass and Weed Killer Concentrate at the labelled rates will not result

in increased environmental exposure relative to other registered products containing ammonium salt of fatty acid. Environmental risks from the use pattern are expected to be limited. Environmental concerns have been mitigated through adequate statements on the product label.

## Value Assessment

Ammonium nonanoate is a C9 saturated-chain fatty acid salt and is known as ammonium salt of fatty acid. It is one of the few herbicides presently available to domestic users in certain jurisdictions which have enacted legislation restricting pesticide availability for non-essential or cosmetic use. There are a few products containing ammonium salts of fatty acids available in Canadian market. The availability of Green it 4-in-1 Grass and Weed Killer Concentrate from a different manufacturer would be expected to increase market competitiveness.

Efficacy data from 6 studies were submitted to support registration of Green it 4-in-1 Grass and Weed Killer Concentrate. The data supported claims of control or suppression of crabgrass, morningglory, carpetweed, burning nettle, pigweed, palmer amaranth, goose grass, shepherd's-purse, purslane, and hairy nightshade at up to 22.5 kg a.i./ha (or 1.0-6.6% wt a.i. spray concentration).

The use directions for Green it 4-in-1 Grass and Weed Killer Concentrate are consistent with those included on the labels of registered products containing 40% w/w ammonium nonanoate in the US, e.g., Emery Agro 7030 Concentrate. Ammonium nonanoate is known as a non-selective contact herbicide for control of grass and broadleaf weeds. As the product is only applied to undesirable plants, the label advises against applying to desirable plants.

## Conclusion

The PMRA has completed an assessment of the available information and is able to support the registration of Green It 4-in-1 Grass and Weed Killer Concentrate, containing ammonium salt of fatty acid, for contact spray control or rapid burndown of weeds, grasses, moss and algae.

## References

PMRA Document Number	References
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2288034	2013, Enforcement Analytical Method, DACO: 3.4.1
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- 2124717 2011, Green it Pro Grass and Weed Commercial Concentrate Ammonium Nonanoate DACOs, DACO: 4.1,4.6,4.6.1,4.6.2,4.6.3,4.6.4,4.6.5,4.6.6,4.6.8,4.7,4.7.1,4.7.2,4.7.3,4.7.4,4.7.5,4.7.6,4.8
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- 2166337 2012, An Efficacy Trial of Potential Herbicides for Use In Organic Systems, North Dakota State University Dickinson Research Extension, DACO: 10.2.3.1.
- 2166338 2012, Morningglory control with ammonium nonanoate by hand pump spray applicators (Study 1), DACO: 10.2.3.2.
- 2166339 2012, Morningglory control with ammonium nonanoate by hand pump spray applicators (Study 2), DACO: 10.2.3.2.
- 2166344 2012, 2007 Organic Herbicide Trial (Racer), University of California 2007-organic- herbicide-evaluation, DACO: 10.2.3.3.

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