Proposed Interim Registration Review Decision (PID) of Pyrethrins, and the Synergists PBO and MGK-264

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Since 2006, the Environmental Protection Agency (EPA) has reviewed pesticides every 15 years due to the Food Quality Protection Act (FQPA) to determine if they meet the Federal Insecticide, Fungicide, Rodenticide Act (FIFRA) current registration standard. Over time pesticide-use practices change, as do science and policy, so the review ensures products don’t currently pose excessive adverse effects to people or the environment. On August 3, 2021, EPA posted the Proposed Interim Registration Review Decision (PID) for pyrethrins (Case #2580, https://www.regulations.gov/document/EPA-HQ-OPP-2011-0885-0165), and the synergists piperonyl butoxide (PBO, Case #2525, https://www.regulations.gov/document/EPA-HQ-OPP-2010-0498-0043) and MGK-264 (Case #2430, https://www.regulations.gov/document/EPA-HQ-OPP-2012-0415-0031). Pyrethrins are often combined with synergists to extend the activity and are often used in indoor and other environments to kill exposed insects quickly. The deadline to comment on these proposed changes was October 4 but was extended to November 3, 2021. Hence the reason for this article.

The following are proposed changes for pyrethrins which are mainly excerpted from the docket document:

Outdoor mosquito coil products (incense burners) and companion animal dust treatment registrations are being considered for cancellation.

EPA proposes the prohibition of the following application methods for indoor uses:
- Liquid products: broadcast treatments to carpets; broadcast treatments to hard surfaces; perimeter/spot treatments to carpets
- Dusts: broadcast treatments to carpets
- Aerosols: indoor aerosol broadcast spray

EPA proposes the prohibition of the following application methods for outdoor uses:
- Liquid products: Lawn and turf uses
- Dusts: Lawn and turf uses
- Aerosols: Outdoor aerosol space spray

EPA proposes the prohibition of indoor residential treatments with handheld and portable fogger products

EPA proposes the prohibition of applications via misting systems for the following uses
- Outdoor residential
- Animal barns

EPA proposes to prohibit the use of liquid trigger-spray bottle for applications directly to companion animals and livestock

EPA proposes to prohibit the use of ready-to-use dust shaker can products:
- Treatments in warehouses
- Direct applications to livestock

EPA proposes to prohibit pressurized liquid, aerosol can applications directly to livestock

EPA proposes to prohibit dust applications with plunger dusters to foundations/perimeters, turf, landscaping, fields, underpasses, etc.

EPA proposes to prohibit applications with handheld and portable fogging equipment to the following use sites:
- Outdoor industrial/commercial areas (including tires, railyards, and junkyards)
- Greenhouses (ornamentals, roses, cut flowers, container stock, vegetables)
- Food handling establishments and warehouses
- Poultry houses
- Indoor residential living areas

EPA proposes to prohibit applications with manually pressurized handwands (both broadcast and crack and crevice uses) to the following use sites:
- Residential living spaces
- Childcare centers/schools/institutions
- Food handling establishments
- Warehouses

EPA proposes to prohibit applications with mechanically pressurized handguns to the following use sites:
- Nursery ornamentals, vegetables, trees, container stock
- Warehouses
- Livestock (direct treatments)
- Livestock housing/poultry houses/horse barns/feedlots

Additionally, changes are proposed to certain pyrethrin products' PPE requirements and their use on preharvest and postharvest crops

The following are proposed changes for PBO which are mostly excerpted from the docket document.

EPA proposes canceling the following products/uses of PBO:
- Shaker can powder products for:
  - Pets
  - Carpets and Premises
- Indoor broadcast surface, perimeter, crack & crevice sprays
- Pet dust products/uses

EPA proposes the prohibition of PBO for:
- Application via bulb duster and hand crank duster to food handling establishments/commercial non-food areas, residential lawns/gardens
- Livestock dip applications
• Livestock sponge applications
• Foliar broadcast applications via backpack sprayer
• Turf and plants/flowers in landscaped areas
• Application via manually-pressurized handwand:
  o Food-handling establishments, warehouses
  o Canneries
  o Transit protection, including truck beds, boxcars, ship holds
  o Residential living spaces, childcare centers
  o Building structural components, such as walls, slabs, beams, lumber
• Application via mechanically-pressurized handgun:
  o Greenhouses
  o Nurseries
  o Building structural components, such as walls, slabs, beams, lumber
  o Warehouses, food-handling establishments
  o Canneries
  o Transit protection, including truck beds, boxcars, ship holds
  o Livestock
  o Postharvest grain, sweet potatoes in storage
  o Packaged foods in storage
• Application via handheld/portable fogging/misting equipment:
  o Orchards/vineyards, typical field crops, field-grown ornamentals, ornamental nurseries
  o Food-handling establishments, warehouses, dried fruit in storage, poultry houses, barns/feedlots
  o Parks, restaurants, residential homes/apartments/indoor living spaces, childcare centers
  o Residential outdoor areas
• Application via misting systems:
  o Animal barns

Additionally, changes are proposed to certain PBO products' PPE requirements and their use on preharvest and postharvest crops

**EPA proposes the following MGK-264 product changes which are generally excerpted from the docket document.**

The following residential products are being proposed for cancellation:
- Ready to use (RTU) dust shaker can: residential indoor treatment (including carpet dust treatment)
- Personal insect repellent (5% aerosol can and 5% pump spray)
- Liquid shampoo pet products (including vet/groomer shampoo products)

The Agency proposes to prohibit the following methods of application:
- Fogging applications: indoor residential, indoor commercial (warehouses, food handling establishments), indoor agricultural (barn/feedlots, poultry house), and livestock/pets
- Residential indoor aerosol surface spray (this scenario was assessed as “broadcast surface spray” in the human health risk assessment)
- Misting systems in animal barns/feedlots
- Manually pressurized hand wand applications in warehouses and food handling establishments

The following outdoor uses are proposed to be removed from current MGK-264 labels:
- Residential outdoor fogging (EPA reg. no. 2724-808)
- Residential outdoor ULV applications to treat adult mosquitoes (EPA reg. no. 6218-56)
- Outdoor residential turf treatment (EPA reg. no. 498-203, 1021-1768) and
- Outdoor soil/vegetation treatment (EPA reg. no. 498-203, 1021-1768 and 1021-1810)
The referenced documents above explain the reasons behind these proposed changes to pyrethrins, PBO, and MGK-264 labels. Additionally, the EPA specifically requests comments on some of these uses in the dockets.

If these proposed changes will impact your pest management practices, now is the time to make that known. To leave comments as an individual, a group of PMPs, or an association for the EPA regarding these products, please use the links below:


PBO: https://www.regulations.gov/commenton/EPA-HQ-OPP-2010-0498-0035

MGK-264: https://www.regulations.gov/commenton/EPA-HQ-OPP-2012-0415-0025

Precautionary Statement

To protect people and the environment, pesticides should be used safely. This is everyone's responsibility, especially the user. Read and follow label directions carefully before you buy, mix, apply, store or dispose of a pesticide. According to laws regulating pesticides, they must be used only as directed by the label and registered for use in your state.

Disclaimer

This publication contains pesticide recommendations that are subject to change at any time. The recommendations in this publication are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. The label always takes precedence over the recommendations found in this publication.

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