German Cockroach Pheromone (029028) Technical Document

Reason for Issuance: Update to Reflect BPPD Change of Address

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1. Description of the Biochemical

- o Active Ingredient: German Cockroach Pheromone
- o OPP Chemical Code: 029028
- o Year of Initial Registration: 1996
- o Pesticide Type: Biochemical
- o U.S. and Foreign Producers: Woodstream Corporation, Lititz, PA.
- 2. Use Sites, Target Pests, and Application Methods
 - o Target Pest: German cockroach
 - o Application Timing: When needed
 - Registered Uses: German cockroach pheromone is for use in a bait station combined with a German cockroach toxicant such as boric acid. It is registered for indoor nonfood use in residential, commercial and industrial establishments including homes, restaurants, health care facilities, educational institutions, factories, garages, transportation and recreation vehicles, zoos, kennels, utilities, and sewers.

3. Science Findings

A. Biochemical Description

The active ingredient is identified as German cockroach pheromone. The biochemical is adsorbed to the inside of the bait station and acts as a cockroach attractant in a bait station with boric acid as the toxicant.

B. Toxicology

German cockroach pheromone is structurally similar to known and presently registered arthropod pheromones. The data available to date on both lepidopteran and other arthropod pheromones, including several aromatic pheromones, have indicated no mammalian toxicity at the limit dose levels recommended for acute oral, dermal, and inhalation routes. Since a minuscule amount of the pheromone will be adsorbed to the inside of the bait station, there is practically no possibility of human contact with the pheromone. Based on lack of direct human exposure and subsequent negligible risk, the Agency has waived mammalian toxicology data requirements.

C. Human Health Effects

No unreasonable adverse effects to human health are expected from the use of German cockroach pheromone.

1. Risks Posed by Potential Residential, School or Daycare Exposure

Bait station containing the German cockroach pheromone will be used in residential, commercial, and industrial establishments including food and feed handling establishments. However, available information indicates that the active ingredient will present minimal to nonexistent risk to children who may accidentally ingest the ingredients of a bait station. The Agency has made a determination of reasonable certainty of no harm based on known low mammalian toxicity of arthropod pheromones, low application rate for the proposed use, and precautionary labeling with exclusionary language to mitigate risk.

2. Effects on Immune and Endocrine Systems

The active ingredient is a biochemical. The Agency has considered, among other relevant factors, available information concerning whether the biochemical may have an effect in humans similar to an effect produced by a naturally occurring estrogen or other endocrine effects. No known metabolite that acts as an "endocrine disrupter" is produced by this biochemical. Therefore, no adverse effects to the endocrine or immune system are known or expected.

3. Potential for Transfer of the Pesticide to Drinking Water

The bait station is registered for indoor use, and there is minimal to no potential for contamination of drinking water.

4. Acute and Chronic Dietary Risks for Sensitive Subpopulations, Particularly Infants and Children

The Agency has classified this bait station use as non-food. The proposed use pattern will not result in dietary exposure nor are residues on food or feed expected.

5. Aggregate Exposure From Multiple Routes Including Oral, Dermal, and Inhalation

The only expected route of exposure to German cockroach pheromone use in the bait station is via inhalation while placing or retrieving the baits. Each bait station contains a very small quantity (0.1 mg) of the pheromone, and only the attractant pheromone is likely to volatilize and cause exposure. Oral or dermal exposure is not likely to occur because this small amount of the pheromone is adsorbed to the inside of the bait station. Considering nontoxic nature of the compound, and lack of potential for direct exposure to humans, typical use is not expected to have an adverse impact on the general population, including infants and children.

D. Food Quality Protection Act Requirements

No unreasonable adverse effects to human health are expected from the use of German cockroach pheromone. The Agency has considered this biochemical in light of the nine safety factors listed in the Food Quality Protection Act and has made a determination of reasonable certainty of no harm. In short, the Agency has not identified any subchronic, chronic, immune, endocrine, or non-dietary cumulative exposure issues as they may affect infants and children and the general population.

E. Ecological Effects

All Tier I ecological effects data are waived based on the proposed use pattern and lack of exposure. The bait station is registered for indoor use and a very small amount of the pheromone is adsorbed to the inside of the bait station; therefore, the potential for exposure to the environment and/or nontarget species is not expected.

F. Environmental Fate and Groundwater Effects

The environmental fate data requirements were not triggered because no human health or ecological effects issues were indicated for either discipline (40 CFR 158.740(d)(2)(vi)).

4. Summary of Data Gaps

All of the appropriate data have been submitted or waived. There are no data gaps.

5. Additional Contact Information

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