

Calcium Acetate (011470) Fact Sheet

OPP CHEMICAL CODE: 011470 (CAS # 62-54-4)

Summary

Calcium Acetate is registered as a biochemical pesticide. It is a naturally occurring compound that takes form as a white odorless crystalline powder. Calcium acetate is sold as a commodity and has many industrial, medicinal, and food additive uses. With regard to direct human exposure, it is consumed orally as a medicine to reduce phosphate levels in blood, as a stabilizer in most hard candies, and as an anti-roping agent in most commercially sold breads. As a registered biochemical pesticide, it is intended for use as an attractant for yellow jackets in traps. Agency reviews indicate that the use of this compound poses no significant risk to human health or the environment due to limited exposure and negligible hazard.

I. Description of the Active Ingredient

Calcium Acetate is a white odorless powder. It occurs naturally, but is typically produced synthetically. Calcium Acetate is sold commercially and ingested regularly as both a food additive and a medicine. As a biochemical pesticide, Calcium Acetate is an attractant for yellow jackets in traps. Its active character is thought to derive from the degradation of the compound into more redolent degradation products. These more redolent sub-compounds, including acetic acid, are purported to trigger scent receptors in yellow jackets, convincing yellow jackets that a food source is near. Yellow jackets investigate the source of the scent, only to find themselves entrapped.

II. Use Sites, Target Pests, and Application Methods

- **Use Sites:** The product is largely intended for residential uses. Commercial agricultural uses are unlikely, but not prohibited. The product may be used in traps anywhere there are yellow jackets with the following qualifications. Uses are limited to non-food applications. A perimeter of 20 feet must be kept around buildings, gardens, and agricultural crops. The perimeter is to assure that volatilized residues do not contaminate food and that people in the area of the traps are not subject to the potential hazard of increased yellow jacket traffic.
- **Target pests:** Yellow jackets.
- **Application Methods:** Calcium Acetate is contained in a water soluble pouch inside a trap. The user must cut open the trap entrance structure, add the appropriate amount of

water to activate the attractant, and hang the trap. The trap is for a single use and is not designed to be reused or refilled. The used trap is disposed of via trash collection.

III. Assessing Risks to Human Health

No significant human health risks are expected when the pesticide is used in accordance with the label directions. The human health assessment for the 2-Methyl-1-butanol notes the following: 1) no exposure is expected due to the active ingredient's containment in traps; 2) the active ingredient is naturally occurring and is not associated with any hazard; 3) people are regularly exposed to the active ingredient as a food additive without known incident; 4) traps are intended for non-food uses only; 5) traps are to be kept at a minimum of 20 feet from buildings and food crops; 6) the active ingredient volatilizes in very low concentrations and 7) pesticidal residues resulting from volatilization dissipate and degrade rapidly.

IV. Assessing Risks to the Environment

Information submitted to the Agency in support of waiver requests indicate that the pesticide should pose no significant risk to the environment if used in accordance with label directions. The active ingredient is intended use in yellow jacket traps; accordingly, no direct exposures are expected for non-target organisms. The active ingredient volatilizes in very low concentrations and dissipates rapidly. And because it biodegrades rapidly, it is not expected to accumulate in the environment. Even in the event of small exposure, there is no ecotoxicity associated with this biochemical. Calcium acetate is an attractant with a non-toxic mode of action. There are no toxicological endpoints associated with non-target organism exposed to the compound. Further, there are no reported incidents of ecotoxicity relative to exposure to this naturally occurring compound. Because of the lack of exposure and toxicity associated with this use of Calcium Acetate, a "No Effect" (NE) determination was issued for threatened and endangered species.

V. Regulatory Information

Calcium Acetate was registered as an active ingredient in February, 2010. There is one registered product containing Calcium Acetate as an active ingredient.

VI. Registrant Information

Bull Run Scientific, VBT,
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Richmond, VA 23225-5519

VII. Additional Contact Information:

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