



(E,E)-8,10-Dodecadien-1-yl Acetate Fact Sheet
February 23, 2015

Office of Pesticide Programs
U.S. Environmental Protection Agency

(E,E)-8,10-Dodecadien-1-yl Acetate (128004) Fact Sheet

Summary

(E,E)-8,10-Dodecadien-1-yl acetate is a new technical grade synthetic Straight-Chain Lepidopteran Pheromone (SCLP) that is structurally similar to, and mimics, a naturally occurring pheromone produced by the female filbertworm, *Cydia latiferreana*, to attract males for mating. This synthetic technical grade active ingredient (TGAI), (E,E)-8,10-Dodecadien-1-yl acetate, is intended to mitigate the effects of the filbertworm by disrupting the normal mating cycle of this pest in pomegranates and other pome fruits and hazelnuts and other tree nut crops. The TGAI will be formulated into the proposed end-use product (EP), Isomate® FBW Ring (EPA File Symbol No. 53575-UL), at a nominal concentration 88.93%. The EP is a twin-tube ring dispenser that will be placed on lateral branches in the upper third of the tree canopy. The use of (E,E)-8,10-Dodecadien-1-yl acetate as a SCLP is not expected to cause any unreasonable adverse effects to human health or the environment.

I. Description of the Active Ingredient

(E,E)-8,10-Dodecadien-1-yl acetate is a new technical grade synthetic Straight-Chain Lepidopteran Pheromone (SCLP) that is structurally similar to, and mimics, a naturally occurring pheromone produced by the female filbertworm, *Cydia latiferreana*, to attract males for mating. This synthetic technical grade active ingredient (TGAI), (E,E)-8,10-Dodecadien-1-yl acetate, is intended to mitigate the effects of the filbertworm by disrupting the normal mating cycle of this pest in pomegranates and other pome fruits and hazelnuts and other tree nut crops.

II. Use Sites, Target Pests, and Application Methods

Use Sites: Pomegranates and other pome fruits; hazelnuts and other tree nut crops

Target Pests: Filbertworm, *Cydia latiferreana*

Application Methods: Twin-tube ring dispenser that will be placed on lateral branches in the upper third of the tree canopy

III. Assessing Risks to Human Health

SCLPs have been well characterized by the Agency since 1994 when the Agency issued a final rule establishing an exemption from the requirement of a tolerance for residues from the use of lepidopteran pheromones that are naturally occurring compounds, or identical or substantially similar synthetic compounds (40 CFR 180.1153). In addition, EPA's regulations at 40 CFR 158.2050(a)(2) and 158.2060(a)(2) exempt SCLP manufacturing-use products from human health and environmental toxicology data requirements. These data were waived based on the criteria presented in the Organisation for Economic Co-operation and Development (OECD) publication - Guidance for Registration Requirements for Pheromones and Other Semiochemicals Used for Pest Control (OECD, 2002; <http://www.epa.gov/pesticides/biopesticides/regtools/index.htm>). No risks to human health are expected

from the use of lepidopteran pheromones based on demonstrated low toxicity in animal testing and expected low exposure to humans.

IV. Assessing Risks to the Environment

As indicated in Section III, SCLPs have been well characterized by the Agency since 1994 when the Agency issued a final rule establishing an exemption from the requirement of a tolerance for residues from the use of lepidopteran pheromones that are naturally occurring compounds, or identical or substantially similar synthetic compounds (40 CFR 180.1153). Adverse effects to non-target organisms are not expected because pheromones are released in very small quantities in the environment and act on a select group of insects. Thus, given that these compounds present both low hazard and low exposure, the Agency has determined that, when used as directed, they present low risk to non-target organisms.

V. Regulatory Information

This is the first registration of a product containing the new SCLP active ingredient, (E,E)-8,10-Dodecadien-1-yl acetate. On June 30, 2014, EPA received an application filed by Pacific Biocontrol Corporation, 575 Viewridge Drive, Angwin, CA 94508, to register the product, Isomate® FBW Ring (EPA File Symbol No. 53575-UL) containing the new SCLP active ingredient, (E,E)-8,10-Dodecadien-1-yl acetate. A notice of receipt (NOR) of this application, allowing for a 30-day comment period, was published in the *Federal Register* on January 21, 2015 (80 FR 2929). No comments were received following this publication.

VI. Applicant Information

Pacific Biocontrol Corporation
575 Viewridge Drive
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VII. Additional Contact Information

Communications and Registration Liaison
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