Health Questions and Answers for STATIC Spinosad ME[™]

Prepared by the Office of Environmental Health Hazard Assessment, CalEPA



Q: What is STATIC Spinosad ME™?

A: STATIC Spinosad ME[™] (referred to as STATIC M) is an insecticidal product containing the active ingredients spinosad and methyl eugenol mixed into an inert waxy paste. The California Department of Food and Agriculture (CDFA) uses this product to control and manage invasive species of fruit flies in urban areas. A small dollop of the insecticidal paste is commonly applied to utility poles, street light poles, fences, and tree trunks, far above the ground and out of reach of children and pets. The insecticidal paste when applied is called a "bait station" because it baits the fruit flies to the inanimate object with methyl eugenol and then kills them with spinosad.

Q: How do the active ingredients, methyl eugenol and spinosad, work?

A: Methyl eugenol is found naturally in certain fruits (such as oranges and bananas) and culinary herbs (such as basil and cloves). Small amounts are added to many food products as a flavoring agent or fragrance. It is an insect attractant in some insecticidal products. Male fruit flies are attracted to the methyl eugenol in STATIC™ and are killed by the insecticide spinosad.

Spinosad is produced by a naturally occurring bacterium, *Saccaropolyspora spinosa*. The US Environmental Protection Agency (US EPA) considers spinosad a "reduced risk pesticide". This means that spinosad poses less risk to human health and the environment than other pesticides allowed for the same uses. Insects are very sensitive to spinosad because it interferes with a key chemical in their nervous system. After fruit flies ingest or come in contact with spinosad, the insect's nervous system becomes overstimulated, leading to paralysis and death. Tests show that spinosad has little effect on the nervous systems of humans and animals, even at very high doses.

Q: What happens to methyl eugenol and spinosad in the environment?

A: Methyl eugenol slowly evaporates from the STATIC[™] bait stations into the surrounding air to attract insects. Once in the air, methyl eugenol degrades in sunlight within a few hours. Spinosad in STATIC[™] does not readily evaporate into the air and remains stable for several weeks. Spinosad does not persist in the environment and is degraded by water, sunlight, oxygen and microbes.

Q: What are STATIC™'s human health effects?

A: STATIC™ bait stations are not expected to cause health effects in humans when used according to the instructions on the label. The main way people can be exposed to methyl eugenol is by inhaling the vapor released from the bait. Low levels of methyl eugenol vapor are released slowly over time. While methyl eugenol is recognized as a carcinogen under California's Proposition 65 law, the cancer risk

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from inhaling the released vapor is negligible. Methyl eugenol is not an eye or skin irritant, and does not cause skin-sensitization reactions such as allergic contact dermatitis in test animals.

The main route of exposure to spinosad is by touching the bait station. Spinosad poses no significant health risk to humans when handled properly. Laboratory tests show spinosad has very low toxicity. There is no evidence of mutations, DNA damage, or cancers in these studies. Spinosad caused temporary slight eye and skin irritation when it was tested at high concentrations. It does not cause skinsensitization reactions such as allergic contact dermatitis in test animals.

Q: What is known about the inert ingredients in STATIC™?

A: There are several inert ingredients in STATIC™, including waxes and oils. Some of these inert ingredients are also used in consumer products such as cosmetics, soaps, and food. No health effects are expected from the use of these inert ingredients in STATIC bait stations.

Q: What precautions should you take in areas treated with STATIC™?

A: As a precaution, avoid unnecessary contact with the pesticide product. Do not touch or try to remove the bait stations. Wash skin and clothing if contact occurs.

Q: Are there other pesticide products on the market that contain methyl eugenol or spinosad?

A: Methyl eugenol is used as an attractant in several insecticidal products. Spinosad is an active ingredient in many insecidical products. The US Department of Agriculture has certified spinosad for organic use because it is non-synthetic and is compatible with organic farming practices.

Q: What should I do if I feel sick after the application of STATIC Spinosad ME™?

A: Call the California Poison Control System hotline at (800) 222-1222 or consult with your physician.

For further information, please contact: Invasive Species Program Office of Environmental Health Hazard Assessment California Environmental Protection Agency

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