Q: **What is Tempo®?**
A: Tempo® is the trade name of a line of pesticide products containing the active ingredient beta-cyfluthrin. Cyfluthrins, including beta-cyfluthrin, are derived from naturally-occurring chemicals called pyrethrins that are found in chrysanthemum flowers. Tempo® is being used by the California Department of Food and Agriculture (CDFA) to control invasive pests such as the Asian citrus psyllid. Tempo® is spot treated onto the foliage of targeted plants using a hand sprayer. Insects are exposed to beta-cyfluthrin through contact and ingestion.

Q: **How does the active ingredient, beta-cyfluthrin, work?**
A: When insects ingest or come into contact with beta-cyfluthrin, it binds to their nerve cells. This causes over-stimulation of the nervous system and impairment of essential activities, such as feeding and motion. This can lead to the death of the insect. Beta-cyfluthrin is less toxic to mammals than to insects because it is less able to bind to their nerve cells. Mammals also detoxify and excrete beta-cyfluthrin more rapidly.

Q: **What are the health effects of beta-cyfluthrin?**
A: Beta-cyfluthrin is not expected to cause health effects on humans when Tempo® is applied as instructed on the label. Animal testing at levels significantly higher than what humans might be exposed to from Tempo® applications have shown slight eye irritation, effects in the nervous system, and reproductive and developmental effects. These are not applicable to the treatment situations because of the low levels used. Beta-cyfluthrin does not cause cancer or skin-sensitization reactions (allergic contact dermatitis).

Q: **How do regulatory agencies classify beta-cyfluthrin’s health effects and risk?**
A: Pesticide products containing cyfluthrins, including beta-cyfluthrin, are registered by the United States Environmental Protection Agency (U.S. EPA) for use on agriculture sites, residential indoor and outdoor areas, pets and pet houses, and recreational and golf areas. Many cyfluthrin products are classified as “General Use Pesticides.” This means they are available to the general public and their use does not require special training or protective equipment. Most cyfluthrin products for use in agricultural settings or golf courses are classified as "Restricted Use Pesticides" because cyfluthrin can be toxic to fish and aquatic organisms. (CDFA complies with a National Pollution Discharge Elimination System General Permit with criteria to protect aquatic life). Based on animal studies, cyfluthrins are classified by U.S. EPA as chemicals with “no evidence of carcinogenicity.”
Q: **What is known about the inert ingredients in Tempo®?**
A: There are several inert ingredients in Tempo®, all of which have been tested in laboratory animals for toxicity. Some of the inert ingredients caused slight skin or eye irritation when applied at concentrations significantly higher than what humans would be exposed to from Tempo® applications. None of the inert ingredients showed evidence of causing cancer. When used according to label instructions, Tempo® is highly diluted with water, ensuring a very low level of exposure to any one inert ingredient. Some inert ingredients are also used in consumer products such as cosmetics, shampoos, and food and are typically at concentrations much higher than those in the diluted Tempo® solution.

Q: **What happens to beta-cyfluthrin in the environment?**
A: When applied to plant foliage, beta-cyfluthrin adheres to the plant surface; it does not get absorbed into the plant. The beta-cyfluthrin deposited on plant surfaces lasts from a few hours to a few days and degrades relatively quickly under sunlight. Beta-cyfluthrin has a very low tendency to evaporate into the air, does not persist in either water or soil and decomposes rapidly in the environment. Beta-cyfluthrin binds to soil and is not susceptible to leaching into ground water or moving off-site from water runoff.

Q: **What precautions should people take in areas treated with Tempo®?**
A: Avoid unnecessary contact with the pesticide product. Stay out of the yard during treatment. Do not perform yard work or allow children to play under treated trees or plants immediately after the treatment. Rinse off outdoor play areas. Wash skin and clothing if contact occurs. Follow instructions provided by CDFA.

Q: **Can I eat fruits and vegetables from plants treated with Tempo®?**
A: Yes. Thoroughly wash your hands, fruits and vegetables after picking produce that has been harvested from treated plants. Although beta-cyfluthrin has been detected on fruits after treatment, the detected levels are very low and do not pose a health hazard.

Q: **What should I do if I feel sick after the application of Tempo®?**
A: Call the California Poison Control System hotline at (800) 222-1222 or consult with your physician.

For further information, please contact:

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