Q: **What is Merit®?**  
A: Merit® is a line of insecticidal products containing the active ingredient imidacloprid. Merit® can be applied to soil below a plant (soil drench) or to leaves (foliar application). With soil drench, imidacloprid is taken up by the roots and distributed throughout the plant. With foliar application, imidacloprid enters the plant by penetrating the leaves. Insects are exposed to imidacloprid when they chew on plant tissues or ingest plant fluids.

Q: **How does the active ingredient, imidacloprid, work?**  
A: When insects ingest or come in contact with imidacloprid, it binds to their nerve cells. This affects transmission of nerve impulses and causes tremors and other nervous-system problems. This can lead to the death of the insect. Imidacloprid does not bind as strongly to mammalian nerve cells, making it much less toxic to mammals.

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

Q: **How do regulatory agencies classify imidacloprid’s health effects and risk?**  
A: Imidacloprid is classified by the United States Environmental Protection Agency (U.S. EPA) as a “General Use Pesticide.” This means it is available to the general public and its use does not require special training or protective equipment. It is registered for use on turf and ornamental plants and various food and feed crops. Imidacloprid can also be used on buildings for termite control and on cats and dogs for flea control. The U.S. EPA classifies imidacloprid as a chemical with “no evidence of carcinogenicity.”

Q: **What is known about the inert ingredients in Merit®?**  
A: In animal studies, some of the inert ingredients in Merit® caused slight skin or eye irritation when applied at concentrations significantly higher than what humans would be exposed to from Merit® applications. When used according to label instructions, Merit® 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, soaps, and food.
Q: **What precautions should people take if Merit® is applied to soil in their yard?**

A: Do not perform yard work or allow children to play near the treated areas, trees or plants immediately after treatment. Wash skin and clothing if contact occurs. Follow instructions provided by the California Department of Food and Agriculture (CDFA).

Q: **What precautions should people take if Merit® is applied to plants in their yard?**

A: Foliar application involves spraying large droplets of the diluted formulation onto the leaves of plants. The droplets will either stick to the foliage or drop quickly to the ground. Inhalation exposure is expected to be minimal because the droplets are too large to be inhaled and imidacloprid has a very low tendency to evaporate. During the treatment, individuals who believe they may be especially sensitive to chemicals should stay indoors, close all windows and doors that open to the outside, and turn off ventilation systems that receive outside air. Follow instructions provided by CDFA.

Q: **Can I eat fruits and vegetables from plants treated with Merit®?**

A: If Merit® is applied to the foliage, imidacloprid may be found on the outside of fruits and leaves of treated plants. Produce can be harvested 24 hours after treatment and should be washed before eating. If Merit® is applied to soil, imidacloprid is taken up by the roots and distributed throughout the plant to provide long-lasting control against insects. Imidacloprid has been detected in stems, leaves, and fruits of treated plants. However, the detected levels are very low and do not pose a health hazard.

Q: **Are there other products on the market that contain imidacloprid?**

A: Other pesticide products that contain imidacloprid include Advantix® and Advantage® flea control products and Bayer Advanced Fruit, Citrus and Vegetable Insect Control. These products can be purchased from local nurseries, pet stores, and the internet.

Q: **What should I do if I feel sick after the application of Merit® products?**

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

For further information, please contact:

Office of Environmental Health Hazard Assessment California Environmental Protection Agency 1515 Clay St., 16th Floor Oakland, CA 94612

Phone: (510) 622-3167

May, 2012