Health Questions and Answers for Acelepryn®

Prepared by the Office of Environmental Health Hazard Assessment, CalEPA



Q: What is Acelepryn[®]?

A: Acelepryn[®] is a line of insecticidal products containing the active ingredient chlorantraniliprole. It is registered for use on turf and ornamental plants. Acelepryn[®] is being used by the California Department of Food and Agriculture (CDFA) to control invasive pests such as the Japanese beetle. Acelepryn[®] is applied by CDFA to turf and groundcover and then watered into the soil, or is applied to the leaves on ornamental plants. When watered into the soil, chlorantraniliprole is taken up by the roots and distributed throughout the plant. Insects are exposed to chlorantraniliprole in the soil particles, organic matter and root system of plant, or on leaves when they feed on plants.

Q: How does the active ingredient, chlorantraniliprole, work?

A: When insects ingest or come into contact with chlorantraniliprole, it binds to muscle cells. This causes contraction of muscles and paralysis, leading to the death of the insect. Chlorantraniliprole does not bind as strongly to mammalian muscle cells, making it much less toxic to humans, pets and other mammals.

Q: What are chlorantraniliprole's human health effects?

A: Animal testing shows chlorantraniliprole affects the liver and body weight. However, these effects are not expected at the low levels of chlorantraniliprole that occurs when Acelepryn[®] is used according to instructions on the label. Chlorantraniliprole has not been shown to cause cancer, eye irritation or skin-sensitization reactions (allergic contact dermatitis) in test animals.

Q: How do regulatory agencies classify chlorantraniliprole?

A: Chlorantraniliprole is classified by the US Environmental Protection Agency as a "Reduced Risk" pesticide when used on crops such as apples, lettuce, peaches, pears, tomatoes and turf. This means that chlorantraniliprole poses less risk to human health and the environment than other pesticides allowed for the same uses. While the US EPA classification officially pertains only to commercially grown crops and turf, the Office of Environmental Health Hazard Assessment believes that chlorantraniliprole poses less risks than other pesticides that CDFA could use to control invasive pests.

Q: What is known about the inert ingredients in Acelepryn®?

A: In animal studies, some of the inert ingredients in Acelepryn[®] caused slight skin or eye irritation when applied at concentrations significantly higher than what humans would be exposed to from Acelepryn[®] applications. When used according to label instructions, Acelepryn[®] is highly diluted with water, ensuring a very low level of exposure to any one inert ingredient.

Q: What precautions should people take when Acelepryn® is applied in their yard?

A: As a precaution, individuals should stay indoors during treatment, close all windows and doors that open to the outside, and turn off ventilation systems that receive outside air. Inhalation exposure is expected to be minimal because chlorantraniliprole has a very low tendency to evaporate. Follow all instructions provided by CDFA.

Q: What precautions should people take after Acelepryn[®] has been applied in their yard?

A: Residents should not perform yard work or allow children to play near the treated areas immediately after treatment. Wait until the material has dried before entering into the treated area. For those wishing to take extra caution, wait at least 24 hours after treatment before entering the treated area. If it is necessary to enter prior to the material drying, wear gloves and clothes to protect the skin from direct contact with residues, and wash skin and clothing if contact occurs. Follow all instructions provided by CDFA.

Q: Can I eat fruits and vegetables from plants exposed to Acelepryn®?

A: CDFA is not applying Acelepryn[®] to plants with fruits and vegetables for consumption. CDFA is applying Acelepryn[®] to turf and groundcover or as spot treatment to foliage of ornamental plants. As a precaution, protect your fruits and vegetables against spray drift and wash them before eating.

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

A: There are over-the-counter pesticide products that contain chlorantraniliprole for home garden use.

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

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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