United States Environmental Protection Agency Prevention, Pesticides and Toxic Substances (7508C) EPA 738-F-00-012 September 2000

EPA Mevinphos Facts

EPA has assessed the dietary risk of mevinphos and prepared a "Report on FQPA Tolerance Reassessment Progress and Interim Risk Management Decision" for this organophosphate (OP) pesticide. Mevinphos fits into its own "risk cup"-- its individual risks are within acceptable levels.

Mevinphos has no U.S. registrations and currently has fifteen import tolerances. Mevinphos does not pose acute or chronic dietary risk concerns, and no risk mitigation is necessary at this time.

EPA's next step under the Food Quality Protection Act (FQPA) is to complete a cumulative risk assessment and risk management decision encompassing all the OP pesticides, which share a common mechanism of toxicity. The interim decision on mevinphos cannot be considered final until this cumulative assessment is complete. Further risk mitigation may be needed at that time.

EPA is reviewing the OP pesticides to determine whether they meet current health and safety standards. Older OPs need decisions about their eligibility for reregistration under FIFRA. OPs with residue limits in food (tolerances), drinking water, and other nonoccupational exposures also must be reassessed to make sure they meet the new FQPA safety standard.

The OP Pilot Public Participation Process

The organophosphates are a group of related pesticides that affect the functioning of the nervous system. They are among EPA's highest priority for review under the Food Quality Protection Act.

EPA is encouraging the public to participate in the review of the OP pesticides. Through a six-phased pilot public participation process, the Agency is releasing for review and comment its preliminary and revised scientific risk assessments for individual OPs. (Please contact the OP Docket, telephone 703-305-5805, or see EPA's web site, www.epa.gov/pesticides/op .)

EPA is exchanging information with stakeholders and the public about the OPs, their uses, and risks through Technical Briefings, stakeholder meetings, and other fora. USDA is coordinating input from growers and other OP pesticide users.

Based on current information from interested stakeholders and the public, EPA is making interim risk management decisions for individual OP pesticides, and will make final decisions through a cumulative OP assessment.

The mevinphos interim decision was made through the OP pilot public participation process, which increases transparency and maximizes stakeholder involvement in EPA's development of risk assessments and risk management decisions. EPA worked with affected parties to reach the decisions presented in this interim decision document, which concludes the OP pilot process for mevinphos.

Uses

• Mevinphos is an insecticide-acaricide used to control insects that attack fruit and vegetable plants. It is not registered for use in the U.S. • Fifteen import tolerances are currently established for residues of mevinphos in or on imported broccoli, cabbage, cauliflower, celery, cucumbers, grapes, lettuce, melons, peas, peppers, spinach, summer squash, strawberries, tomatoes, and watermelon.

Health Effects

• Mevinphos can cause cholinesterase inhibition in humans; that is, it can overstimulate the nervous system causing nausea, dizziness, confusion, and at very high exposures (e.g., accidents or major spills), respiratory paralysis and death.

Risks

• Potential acute and chronic dietary exposures from eating food crops treated with mevinphos are below the Agency's level of concern for the entire U.S. population, including infants and children.

Risk Mitigation

• Dietary risk from exposure to mevinphos does not exceed EPA's level of concern. Therefore, no mitigation is necessary and no further actions are warranted at this time.

Next Steps

- Numerous opportunities for public comment were offered as this decision was being developed. The mevinphos interim decision document therefore is issued in final (see www.epa.gov/REDs/ or www.epa.gov/REDs/ or www.epa.gov/REDs/ or www.epa.gov/pesticides/op), without a formal public comment period. The docket remains open, however, and any comments submitted in the future will be placed in this public docket.
- When the cumulative risk assessment for all organophosphate pesticides is completed, EPA will issue its final tolerance reassessment decision for mevinphos and may make further FQPA-related determinations and may request risk mitigation. The Agency will reassign one tolerance and amend two tolerances for mevinphos, now. The tolerance on watermelon will be reassigned (watermelon is covered by the tolerance on melons), the tolerances on cucumbers and melons will be lowered, and the other twelve tolerances are to be determined after additional data is submitted to the Agency. For all OPs, raising and/or establishing tolerances will be considered once a cumulative assessment is completed.