

EPA Chlorothoxyfos Facts

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

Because chlorothoxyfos was initially registered after 1984, it is not subject to reregistration. Its use on corn does not pose risk concerns and risk mitigation is not 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 chlorothoxyfos cannot be considered final until this cumulative assessment is complete. Further risk mitigation may be required 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) and other non-occupational exposures also must be reassessed to make sure they meet the new FQPA safety standard.

The chlorothoxyfos 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 chlorothoxyfos.

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 risk management decisions for individual OP pesticides, and will make final decisions through a cumulative OP assessment.

Uses

- Chlorethoxyfos is a restricted use organophosphate insecticide registered for use on field corn, seed corn, sweet corn, and popcorn for the control of corn rootworms, wireworms, cutworms, seed corn maggots, white grubs, and symphylans.
- Annual domestic use is low—37,000 to 122,000 pounds of active ingredient per year.

Health Effects

- Chlorethoxyfos 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

- Dietary risks from food and drinking water are not of concern.
- Handler risk is not of concern when the appropriate personal protective equipment (PPE) and engineering controls are utilized during the loading and application processes.
- EPA did not quantitatively assess the risks to post application workers. Since chlorethoxyfos is mainly incorporated into the soil at planting, minimal post application exposure is anticipated.

Risk Mitigation

- The Agency is requiring five label changes which are intended to mitigate potential occupational risk and/or better characterize risk from occupational exposure to chlorethoxyfos products. The changes include emergency PPE requirements, a reduction in PPE in some circumstances, and the addition of a double notification statement.

Next Steps

- Numerous opportunities for public comment were offered as this decision was being developed. The chlorethoxyfos interim decision document is therefore issued in final (see 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.
- To effect the label amendments as quickly as possible, time frames for making the changes required by the chlorethoxyfos interim decision document are shorter than those in a usual RED. The Agency is requiring that all labels must be amended to include the above mitigation and submitted to the Agency within 90 days after issuance of this document.
- When the cumulative risk assessment for all organophosphate pesticides is completed, EPA will issue its final tolerance reassessment decision for chlorethoxyfos and may require further risk mitigation measures.