



Chlorpyrifos

What is this insecticide used for?

Where is it used?

What are the risks?

JUST THE FACTS

Chlorpyrifos is...

An organophosphate (OP) insecticide used to control many devastating pests including termites, fire ants, root maggots, rootworms, craneflies, borers, weevils and cutworms. Chlorpyrifos was first registered in 1965 but is no longer registered for residential use except in rodent baits.

Uses of chlorpyrifos...

Chlorpyrifos products are registered for use on over 100 Oregon crops. Uses in agriculture protect feed and food crops such as most vegetable crops, fruit and nut trees, wheat, alfalfa, onions and other field crops. Non-food or feed sites include ornamental turf, conifer and shade trees and other ornamental plants, Christmas trees, golf courses, industrial building sites and cattle ear tags. **Chlorpyrifos is also used to control fire ants and mosquitoes for public health purposes.**

Chlorpyrifos is registered for use in around 100 countries making it an important crop protection product for crops that are destined for exportation. Exported crops must meet strict phytosanitary requirements for pests and diseases only with products that are approved for use in the receiving country.

How does chlorpyrifos

work? Chlorpyrifos blocks an enzyme in insects that stops nerve cells from firing without stopping. When the enzyme is blocked, the nerves don't send normal signals and the nervous system fails.

Is chlorpyrifos linked to cancer?

The U.S. EPA has determined that there is "evidence of non-carcinogenicity for humans" for chlorpyrifos.

What happens to chlorpyrifos in the environment?

Since chlorpyrifos binds tightly to soil, it may wash into rivers or streams if erosion moves the treated soil. Plant roots don't usually absorb it, and it doesn't leach easily into groundwater. Chlorpyrifos is broken down in soil by ultraviolet light, soil microbes, pH and temperature.

Protecting Workers

The federal Worker Protection Standard (WPS) applies to all pesticides used in agricultural and timber plant production. WPS requires significant measures to be taken to ensure workers are

informed of pesticide exposure potential, provide protections from pesticide exposures and mitigate any exposures that may happen. Oregon OSHA has implemented additional regulations to the federal WPS for those working with pesticides on agricultural sites.

Current status of chlorpyrifos

Currently, EPA's 2006 determination that there is reasonable certainty of no harm from approved uses of chlorpyrifos on food crops remains in effect until EPA completes the ongoing Registration Review Process of chlorpyrifos using valid and reliable scientific information. Additionally, the U.S. Court of Appeals for the 9th Circuit will be rehearing a case related to the petition filed with the EPA seeking revocation of food tolerances and cancellation of registration. EPA denied that petition but a three judge panel then ordered EPA to revoke tolerances and cancel registration of chlorpyrifos, and EPA appealed. On February 6, 2019 two orders were issued for a rehearing of oral arguments with an 11-judge panel to reconsider the 3-judge panel's previous order.