What is tribufos?
Tribufos (also called S,S,S-tributyl phosphorotrithioate) is a defoliant, a chemical that removes the leaves from plants. It is used to remove leaves from cotton plants, which makes it easier to harvest. It is a colorless to pale yellow liquid with a skunk-like odor.

How can I be exposed to tribufos?
Exposure to tribufos for most people is extremely low. Inhalation (breathing) exposure to tribufos is expected to be extremely low for the general population, except for people who live near tribufos-treated cotton fields.

Some products, such as cottonseed oil or cottonseed meal, may contain very low amounts of tribufos. Meat or milk from livestock fed tribufos-containing cottonseed products may also contain very low levels of tribufos. Eating products that may contain such low levels of tribufos is not likely to cause any illness.

Tribufos is rarely detected in groundwater or drinking water.

Workers who apply tribufos to cotton fields or maintain and harvest cotton plants may get higher levels of inhalation and dermal (skin) exposure than the general population.

How can tribufos affect my health?
Most people are not likely to be exposed to levels of tribufos that are high enough to cause health problems.

People who were exposed to very high levels had symptoms like excessive sweating, diarrhea, drowsiness, unconsciousness, and difficulty breathing. They also experienced tearing of the eyes, runny nose, nausea, vomiting, loss of bladder control, and loss of muscle control. It is very unlikely that most people would ever be exposed to these high levels.

Animals exposed to tribufos at high levels showed problems with their nervous systems like unsteadiness and tremors. Animals exposed to tribufos also had low blood cell counts and loss of body weight. Daily exposure for over a year led to small intestine and adrenal gland problems, and lung and intestinal cancers.

How can tribufos affect children?
Children would be expected to have the same health problems as adults if exposed to high levels.

The levels of tribufos found in the environment are lower than levels known to cause health problems.
Can tribufos cause cancer?

Tumors in the small intestine, liver, and lung have been reported in mice exposed to tribufos at levels many times higher than levels allowed in human food sources.

A committee for the Environmental Protection Agency Office of Pesticide Programs determined that tribufos is unlikely to cause cancer at low doses, but likely to cause cancer at high doses. For most people, exposure to tribufos is at levels well below those that seemed to cause cancer in animals.

Can I get a medical test to check for tribufos?

There are no reliable medical tests to determine whether you have been exposed to tribufos. If you think you have been exposed to tribufos, talk with your doctor right away or call poison control.

How can I protect myself and my family from tribufos?

People who live near agricultural areas where tribufos has been sprayed should not enter the treated area for 7 days after tribufos application. If you are aware that tribufos is being sprayed, go indoors during spraying and stay there for a few hours after spraying is complete. Children should not be allowed to play in areas being sprayed with tribufos or that have been sprayed in the last 7 days.

Agricultural workers who come into contact with tribufos should change work clothes before going inside the home and wash work clothes separately from other family clothing.

For more information:

Call CDC-INFO at 1-800-232-4636, or submit your question online at https://wwwn.cdc.gov/dcs/ContactUs/Form

Go to ATSDR’s Toxicological Profile for Tribufos at https://www.atsdr.cdc.gov/ToxProfiles/tp.asp?id=1487&tid=292


Find & contact your ATSDR Regional Representative at http://www.atsdr.cdc.gov/DRO/dro_org.html